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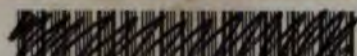
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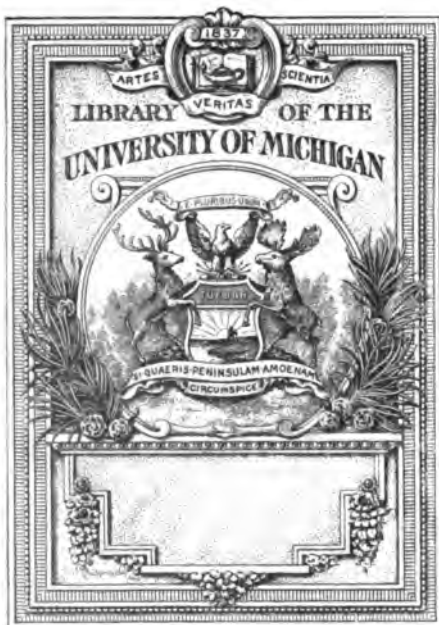
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OBSERVATIONS ON THE CONDUCT OF LINGERING LABOR.*

BY

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NEW YORK.

It is often useful to refresh our minds on those questions which concern us most frequently in the line of our ordinary duties; to compare notes as to methods of practice in those cases which may be classed among the general, rather than among the special and infrequent.

While the grand principles observed by educated men in the management of a particular disease or an ordinary case of labor are in the main uniform, and on the same general plan, the details of practice are often essentially different. Each observer views the phenomena of nature from his own standpoint, and draws his conclusions according to the bent of his own mind, guided by the results of previous training

* Read before the Obstetrical Bureau of the Homœopathic Medical Society of the County of New York.

and experience. With these thoughts in mind I have ventured to assume that it might be interesting and perhaps profitable to some who will listen to this paper to consider some points in the management of a case of labor which could fairly be called normal, and yet would present, at some time in its progress, unfavorable features, demanding the intervention of art. I think the majority of my hearers will agree with me when I assert that nearly every case of labor requires aid, of one kind or another, before it is completed. Indeed, it is the exception in my practice to meet with a case in which the successive stages of labor pass normally one into the other without assistance either medical or obstetrical. We all admit that labor is a purely physiological process, and, as such, it should be terminated by the natural powers, unaided and alone, and this would be the case were women always in a state of perfect health and development. Among primitive people, and in the early history of civilized races, labor was undoubtedly terminated without assistance much more frequently than it is at the present time. It is a well established fact that the difficulties of childbirth increase with the progress and civilization of a people. In Europe and America, so thorough an intermingling has taken place by the varied supremacy of different nations, and their far-reaching conquests, that a simple natural labor, such as takes place in a tribe of primitive people, is the exception and not the rule. Two factors, viz., the large size of the child's head and deficient muscular development of the mother, conspire to increase the difficulties of a labor, as witnessed among the daughters of refinement. The women of to-day are not, as a rule, so fortunate as Nokomis, whom Longfellow describes in the song of Hiawatha :

There among the ferns and mosses,
There among the prairie lilies,
On the muskoday, the meadow,
In the moonlight and the starlight
Fair Nokomis bore a daughter.

Our art would be little required if all infants came into the world as happily as did Wenonah.

With this preamble as an apology for what may seem a threadbare theme, I shall proceed to discuss the measures applicable to the management of the first stage of labor. It was formerly the teaching that so long as the membranes remained unruptured, it was a matter of no particular consequence how long this stage continued. The elements of pain, fatigue, and shock were practically ignored by the older writers. Blundell,* who promulgated the well-known aphorism that "meddlesome midwifery is bad," says: "In lingering labors, generally, unless there are symptoms of danger, the less you interfere the better, for a meddlesome midwifery is bad; and if the protraction of the delivery be the only inconvenience which the patient suffers, and if there are no convulsions, no floodings, nor well-marked signs of collapse to excite alarm, it is scarcely necessary that the accoucher should interfere at all." At the present day, one would be very deficient in the duties of his calling if he hesitated to afford relief until "convulsions, floodings, and collapse" were imminent. In Churchill's "Midwifery," one of the best books of two or three generations ago, it is laid down that labor is not to be considered as even tedious unless more than twenty-four hours have elapsed; again, we are told that no matter how long the delay, we are not justified in interfering unless we find evil resulting.

In sharp contrast to such advice is the practice of the present day. The shock which the nervous system receives from a labor lasting twenty-four hours or more is now considered, and rightly, a serious thing. We do not think it good practice to wait with our hands folded, doing nothing, until symptoms of mischief have actually arisen. We deem it our duty to afford as much relief as possible by means which in no way interfere with the progress of a labor, or

* "Lingering Parturition," Blundell's *Midwifery*, p. 359.

do harm to the mother or child. I would not encourage needless interference; that would be as reprehensible as the opposite extreme.

The language of Prof. Lusk relative to this subject is full of wisdom. He says: "It is hardly an exaggeration to state that the greater proportion of the sins of midwifery practice are committed in the management of normal labors. It is equally easy to fall into errors of commission and errors of omission. It is as necessary to know when to abstain, as when to interfere. It is an old, but always a good rule, not to meddle with the physiological performance of a function; but the rule, when applied to obstetrics, presupposes a thorough familiarity with the physiological processes of childbirth, and the contingencies to which women in parturition are exposed. There is no sense in reposing a blind, unreasoning confidence in the powers of nature. Indeed, legitimate grounds for interference are liable to arise in the simplest cases. The attitude of the medical attendant should be one of watchful expectancy. He should be ready, if needful, to assuage pain, to forestall dangers, and to limit the duration of suffering."

Believing fully in these principles I shall consider those measures which may be needful to promote the dilatation of the cervix uteri when delayed or unusually painful. I shall omit all reference to those cases in which rigidity of the cervix is due to structural causes such as cicatrices, inflammatory or malignant indurations, tumors, etc., all of which are exceedingly rare. I shall include only those more common cases of non-dilatation from inertia, spasmodic or irregular and cramp-like uterine action, premature rupture of the membranes, misdirection of the uterine action from anterior obliquity of the uterus, adhesions of the membranes, over-distention of the uterus from excess of liquor amnii and deficiency of this fluid, with impaction of the foetal head against the thinned and partly dilated cervix. I shall also dwell on the necessity for an accurate diagnosis of the

position of the head before resorting to instrumental delivery, when delay occurs at the beginning of the second stage, or when the head is still in the region of the mid-pelvic plane.

We have many homœopathic remedies which are capable of exerting a most beneficent influence in regulating spasmodic pains and harmonizing irregular uterine action, thus rendering effective the action of the uterus, and opening the gateway to the egress of the ovum. Among these medicines are:

Aconite.—Useful when the pains of labor are distressing; vagina hot, dry, tender, and undilatable. Violent labor pains following in rapid succession, particularly with a large child (head seems immovable). Contractions insufficient, pains overwhelming; shrieking; red, sweating face; thirsty. Head and hands glowing; pulse hard; skin scarcely moist; increased action of heart.

Aconite soothes restlessness, relieves nerve and vascular tension, congestion, heat, and pain. The remedy may, when indicated, even promote labor, when the position of the child is defective, by increasing the efficiency of the contractions and lessening local congestion, so that an unfavorable position becomes converted into one more favorable for delivery.

Actea racemosa.—Labor pains severe, tedious, or spasmodic, with fainting fits or cramps; "shivers" in the first stage of labor; labor pains spasmodic, with rigidity of the os uteri.

Belladonna.—Labor pains deficient; cease, have only periodical slight pressure on sacrum; amniotic fluid gone, yet os still spasmodically contracted. False, spasmodic pains; labor slow and tedious.

Caulophyllum.—Tormenting, useless pains in the beginning of labor. Labor pains short, irregular, spasmodic; patient very weak and irritable. No progress being made. *Pains become weak from long protracted labor causing exhaus-*

tion ; patient thirsty and feverish, *weak labor pains*, passing off with a shiver and causing much distress.

Chamomilla.—Labor pains spasmodic and distressing ; and the patient is *over-sensitive to the pain*, hot, thirsty, and inclined to scold. Says she *cannot* and *will not* bear the pain, and something *must* be done to relieve her ; scolds the doctor because he does nothing for her ; desires fresh air, says she must and will get up. *Chamomilla* will *relieve* nerve tension, remove hypersensitiveness of the nerves, and promote dilatation of the cervix.

Causticum.—Labor pains are principally in the back and no progress is made.

Coffea.—Ineffectual labor pains ; contractions of uterus and pressure upon os uteri causing only pain in small of back. Labor pains insupportable to her feelings ; she feels them *intensely* ; *weeps* and *laments* profusely. *Although* the pains are severe they are not efficacious ; constant crying, whining, lamenting. Her sensitiveness to pain resembles the condition for which *chamomilla* is useful, but, with the latter remedy, the patient is cross and spiteful, and declares she *will not* endure the pain, that something must be done to relieve her, while under *coffea* the patient laments and weeps because her sufferings are so severe.

Gelsemium.—This remedy is useful for a thick, rigid cervix which dilates slowly. Cutting pains in abdomen from before, backward and upward, rendering labor pains useless ; these come on with every pain, are very distressing, and may be felt throughout the body.

Atony of uterus ; labor pains gone ; os widely dilated ; face flushed. With every pain child seems to ascend instead of descend. Pains leave uterus and fly all over body.

Kali carb.—Labor pains insufficient, violent backache, wants back pressed ; bearing down pain from back into pelvis, sharp cutting pains across lumbar region, or passing off down buttocks, thus hindering labor ; pulse weak. The pains are stitching and shooting, or they are in the back,

shooting down into the glutei muscles, and pass off down thighs.

Pulsatilla.—Inertia of uterus; irregular pains, spasmodic and ineffectual.

For increasing weak and flagging pains *caulophyllum* and *pulsatilla* rank first.

Kali phos. is highly commended by Drs. Boericke and Dewey, in their last edition of their work on "Schüssler's Tissue Remedies" for "feeble and ineffectual labor pains. In tedious labor from constitutional weakness, this remedy gives vigor and helps materially." I have never employed *kali phos.* and cannot speak of its usefulness from actual experience.

In this connection *ergot* deserves consideration. The influence which this remedy exerts upon unstriated muscular fiber in promoting its activity renders it highly useful in labor when properly employed. It is now generally recognized that *ergot* and its alkaloids are dangerous in the first and second stages of labor, since by producing too violent contractions it may cause an excessive compression of the child, a sudden diminution in the force and frequency of the heart sounds, premature separation of the placenta, or tetanoid contractions, which instead of accelerating labor may seriously retard it. This drug is now absolutely prohibited in the chief lying-in hospitals in London, and in the Rotunda Hospital in Dublin. In America its use is greatly restricted, being confined almost wholly to the third stage of labor. Notwithstanding these objections to the drug, which are undoubtedly well-founded, its use in simple atony affecting feeble, relaxed multiparæ, even in the first and second stages of labor, is not without decided benefit in many cases. Nor are the dangers so great when properly used. Instead of *ergot*, old-school physicians use the sulphate of quinine in ten or fifteen grain doses, not as an oxytocic, but as a general stimulant and promoter of vital energy. We, as homœopathic physicians, will often find

pulsatilla or *caulophyllum* all-sufficient. Still there are some cases which do not respond to these medicines, nor to friction of the abdomen, nor change of position. Something more energetic is required. Of course we always have the forceps operation as an alternative. But I am not referring to forceps cases, nor comparing medical with obstetrical procedures. It is with the medical treatment alone that we are concerned at present. In these cases ergot may be given in small or carefully regulated doses, just sufficient to produce its physiological effect, with great advantage to the progress of the labor. One-half drachm of the fluid extract, dissolved in twelve teaspoonfuls of water, of which solution one teaspoonful may be given every ten or fifteen minutes until contractions improve in force and frequency. Thus weak pains may be stimulated to greater vigor and absent contractions incited anew. Whenever ergot is employed, or in whatever doses, the full physiological effect should never be forgotten, nor should this effect ever be produced to its full limit while there is any obstacle to the speedy delivery of the child.

Vigorous contractions of the uterus may be made more effective in dilating the cervix, when this process is retarded, by attention to the state of the membranes. Dr. Trenholme, of Montreal, has pointed out that dilatation may be promoted by sweeping the finger round the inner surface of the os. This maneuver, it is stated, liberates adhesions which retard dilatation. Whatever the *rationale* of this procedure, certain it is that it is often very effective in producing the desired result. It is an old and wise rule to allow the membranes to rupture spontaneously, so long as the dilatation is progressing favorably. The larger and fuller the bag of waters the better, for the influence which this exerts in dilating the vagina as well as the cervix is highly favorable to a short second stage. But just the requisite amount of amniotic liquor and the proper degree

of dilatation are not always associated conditions when their conjunction would be most desirable.

Sometimes the membranes rupture prematurely, and the head of the child is found pushed down into the pelvic cavity in close contact with the cervical segment of the uterus, the os only slightly dilated and pointing directly backward into the hollow of the sacrum. The anterior or uterine valve, as Robert Barnes calls the long anterior lip of the uterus, is found stretched tightly over the head of the child. This condition is unfavorable to speedy dilatation, and, indeed, is often most troublesome on account of the severe pain which it gives rise to, as well as the prolongation of the first stage. In such cases the finger of the accoucher should be hooked into the circle of the os and the anterior lip drawn forward so that the center of the os will correspond to that portion of the child's head which is lowest in the pelvic cavity, and upon which the driving force is chiefly directed. Thus will the dilatation be facilitated and the first stage shortened. In this connection a word may be said with reference to those cases in which the thick, œdematous anterior lip becomes impacted between the head and the pubes. Pushing up the anterior lip in the interval between the pains, and working it over the head as rapidly as may be, is not only legitimate, but essential. Less injury will be done by this procedure than by allowing the swollen lip to become impacted and bruised, as would be the case were it allowed to remain for hours in this situation.

To return to the "bag of waters." Sometimes the uterus contains such a quantity of liquor amnii, and is so overdistended thereby, that it cannot act to advantage. This condition may be recognized by the fullness and bulging of the lower zone of the uterus, by the absence of bulging of the sac during a pain, and by the general distension of the uterus. The period of dilatation, with its inevitable suffering, may be decidedly shortened in such cases by puncturing the sac high up to one side, and allowing the water to drain away

slowly. In such cases it is better to delay the rupture of the sac until the os is partially dilated, or at least dilatable. Partial evacuation of the liquor amnii, even though there may not be great uterine distension, is often followed by vigorous uterine contractions. As an essential preliminary to this operation, the cervix must have attained a certain degree of dilatation, it must not be rigid, and the presentation must be favorable, *i.e.*, occipito anterior. There must be no complication, such as prolapse of one of the members, or of the cord. Charpentier says: "Practiced under proper precautions and conditions rupture of the membranes has rendered us great benefit. But we cannot too often repeat, One ought not to act too soon. Hasty intervention is, in the majority of cases, more dangerous than expectation." Artificial rupture is sometimes instrumental in increasing the force of the uterine contractions, when there is a small quantity of liquor amnii, or that equivalent condition, when the head is impacted against the cervical segment of the uterus and the water is pent up behind the head. The head in such cases acts like a "ball valve," and prevents the formation of the bag of waters. Hence, tardy dilatation, wearisome pains, and exhaustion. The patient is unfitted for the arduous second stage when thus worn out by a tormenting first stage. This condition of scanty waters is sometimes associated with tough, thick membranes. This makes the likelihood of spontaneous rupture less liable to occur. If artificial rupture be decided upon, the precautions stated above should not be forgotten. It is possible to increase the quantity of amnial liquor in front of the head, when this is deficient from retention above, by gently pushing the head upward in the interval between pains. The water will seek the lowest level, and, if the head be kept up as much as possible, a protruding sac will quickly form to promote the dilatation.

Excessive and protracted pain during the progress of a labor is an element which often demands our most earnest

attention. All practical accouchers will agree that labors which are very painful and prolonged are the ones which entail most prostration, and protracted convalescence. It is *not* immaterial, as was formerly supposed, how long the first stage of labor continues, provided the membranes are unruptured. The child may not suffer but the mother assuredly does, and no one can measure the intensity of her suffering or the effect it will have upon the subsequent course of labor and the puerperal period.

Excessive pain may be caused by conditions which it is not possible to mitigate by the ordinary remedies, such as have been mentioned. The pain may be due to "great distension of the uterus, to peritoneal inflammation, to malpresentation, or great size of the fœtus, or it may arise from a general hyperæsthetic condition" (Parvin). If the cause can be found it should be removed; the properly indicated homœopathic remedy will often harmonize irregular pains and render the patient more tolerant of distressing contractions. But greater relief than can be afforded by these means will often be necessary. Anæsthetic drugs here find their greatest sphere of usefulness. Chloroform and chloral are the chief representatives of this class. I shall not refer especially to the administration of chloroform. Its value in mitigating the pains of labor is too well recognized to require comment. Suffice it to say that the proper time for the use of chloroform is during the second stage of labor and only exceptionally during the first stage. It is too strong for the first stage and not sufficiently prolonged in its action. When given freely and for any length of time it may cause inertia-uteri. Not so with chloral; this drug does not affect the motor nerves nor impair the contractility of muscle; it is less anæsthetic and more hypnotic than chloroform. Its use during the first stage of labor is just as rational as the use of chloroform during the second stage of labor.

In 1874 Prof. Playfair, of London, directed the attention

of the profession to the value of this drug in labor, and ever since that time it has been a favorite with accouchers of the dominant school. So far as I can learn homœopathic physicians use it but little. When an anæsthetic is required we rely mainly upon chloroform, even in the first stage of labor. We all recognize the necessity of affording relief to the severe suffering which so often attends a prolonged first stage. *Chamomilla* will often render the patient more tolerant of pain, and if the agony be not too severe or too long continued, the remedy will be all-sufficient. *Gelsemium* will improve weak pains and hasten the dilatation of a thick and rigid cervix. *Pulsatilla* will increase the force of flagging contractions, and so it is with many other drugs. Each one is valuable in its place. Notwithstanding these remedies, the first stage is often an exceedingly long and painful period. So painful that the patient is completely exhausted by the time it is completed, and utterly unfit for the severe ordeal of the second stage. Chloroform often serves a good purpose here, but, for prolonged administration, chloral is preferable. In the language of Prof. Playfair, which I can verify from numerous experiences, "Under the use of this agent the pains become longer, steadier, and more efficient; the patient falls into a somnolent condition, dozing quietly between the pains, which are not lessened or annulled, as is the case when chloroform is inhaled freely; and above all, the mild state of excitement, which is so frequent in this class of labor, is calmed and soothed, to the infinite relief of both patient and practitioner."

"Another great good following this practice is that, when the expulsive stage is reached, the patient being already in a state of semi-anæsthesia, very much smaller quantities of the chloroform, or A. C. E. mixture, are required than would otherwise be the case."

In addition to chloroform, I carry in my obstetric bag a mixture composed of chloral, syrup of orange peel, and water, each teaspoonful of which represents seven and one

half grains of chloral. Two teaspoonfuls are given at a dose, and repeated in twenty minutes; this quantity is usually sufficient to produce an effect lasting two or three hours. Rarely will a third dose be required. It seems to me that this is rational medication and not at all inconsistent with homœopathic practice. The result desired is the relief of pain during the performance of a physiological function, which, under existing conditions, is frequently accompanied by the most intense pain. Anything which will assuage pain, give rest to wearied nerves, and at the same time directly promote the process involved, is a blessing too great to be ignored.

I cannot close this essay without speaking of the prime necessity, which exists in all cases where delay occurs while the head is still lingering in the mid-plane of the pelvis, of making an accurate diagnosis of the position of the head, before attempting to deliver with forceps. I am not one of those who believe that it is immaterial what position the head is in, when the forceps operation is undertaken. I believe that the teaching which inculcates the principle that the blades of the forceps should be applied along the sides of the pelvis, without regard to the position of the head, is incorrect and conducive to careless practice. I admit that the blades will pass along the sides of the pelvis and grasp the head without reference to its position before rotation has taken place, more readily than they will to their position on the sides of the head. To accomplish the latter a movement of adjustment is necessary. But in order to adjust them properly, one must know exactly the position of the head. And this is the point I desire to make; ascertain positively where the occiput lies, though to do it it be necessary to anæsthetize the patient, and insert the hand far enough to feel an ear. This is an old rule, but one which modern teaching with reference to the forceps operation has had a tendency to force into the background. The diagnosis of vertex presentations is easy,

but it is not always an easy task to ascertain positively to which side of the pelvis the occiput is directed. When the first stage is protracted, and the head settles slowly into the cavity of the pelvis, by the time it reaches a point where the fontanelles can be easily reached the caput succedaneum is so large one may be very much perplexed in his efforts to say positively just where the occiput lies. In all cases of delay at the commencement of the second stage, or after the head has reached the floor of the pelvis, it is positively essential to know exactly the position of the head. I refer to this fundamental principle because I fear physicians are not sufficiently careful to make a diagnosis further than to satisfy themselves that it is a vertex presentation. The possibility of an occipito-posterior presentation, with all the difficulties that this position may involve, is apt to be overlooked. It may make the difference of a foetal life, or extreme maternal exhaustion, or unnecessary laceration of the soft parts, if an occipito-posterior position is recognized early. It may be necessary to place the patient under chloroform to make as thorough an examination as is required, but this should be done unhesitatingly. When the position is once recognized, some simple maneuver, like making traction on the occipital end of the child's head with one blade of the forceps, or applying both blades as nearly as possible to the sides of the head and slightly rotating them, at the same time that traction is being made, will be sufficient to cause the occiput to become dislodged from its unfavorable position; then the labor will go on uninterruptedly to a fortunate termination. There are no more serious cases in midwifery practice than unrecognized and neglected, or badly treated, occipito-posterior presentations. A labor which has an auspicious beginning may have a terrible ending because the physician in attendance does not take the trouble to ascertain the cause of delay, resting satisfied on the diagnosis of a vertex presentation. Occipito-posterior presentations are more

common than is generally supposed, and their recognition is a matter of great importance.

There are a few measures which it may be necessary to resort to in individual cases not yet mentioned in this paper. For the sake of completeness may be mentioned "manual expression" of the foetus, as first brought prominently before the profession by Kristellar. This manual pressure is applied directly to the uterus to increase the force of feeble pains, or to take their place when entirely absent. The application of the binder to overcome unusual anterior obliquity, and compel the uterus to act more in consonance with the axis of the pelvic inlet, should not be forgotten, nor should proper attention to the state of the rectum and bladder.

ANÆSTHESIA IN MIDWIFERY.*

BY

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Among the many important advances made in the domain of medicine during this century, the introduction of anæsthetics may well be held to take the chief place. Some, perhaps, at the present time, might be inclined to give the first place in importance to antiseptics, but when enough time has elapsed for the world to give a cool judgment, I am sure that the introduction of anæsthetics will be awarded the first place in importance. Certainly, if the nineteenth century had added nothing whatever to any department of the world's stock of useful knowledge or appliances, except what was done by the introduction of anæsthesia and anti-

* Read before the Minnesota Institute of Homœopathy.

sepsis, it would still be entitled to be called a beneficent age.

When the first few successful experiments with ether and chloroform had been published to the world, forty years ago, it was but a few months till they were in use in every civilized country on the globe, and scarce two years till a surgical operation of any importance without the aid of anæsthesia was well nigh as rare a thing as it is now. It is now quite two score years since Sir James Y. Simpson's first successful experiments were made with chloroform in midwifery, and yet it is doubtful if the solace of anæsthesia is granted to one tenth of the women in this country who, at the present day, are called upon to endure the pain of childbirth, a pain which is in most cases much greater than the pain of any surgical operation. There are several reasons for this, some well founded, and some based on sheer foggyism. One thing is surely true and that is, that it is just as much a mercy to relieve the great pain of the parturient woman, as the no greater pain that must be endured by the subject of a surgical operation, and, provided it can be done as safely, it is just as imperative. The objections urged against the use of anæsthetics in ordinary cases of midwifery are that there is always some degree of danger in giving anæsthetics, which is true, as every conscientious surgeon will admit, and it is further charged that the use of anæsthetics retards uterine contractions, and increases the tendency to post-partum hæmorrhage, each of which charges may be admitted as perhaps true in some cases, but by no means as a rule. On the contrary, it is a common experience to find the pulse improve and the pains grow more efficient and regular as soon as enough chloroform or ether has been given to considerably numb the sensation and give freedom from pain and dread of pain in intervals. This is all the more true in those cases in which that feeling of dread anxiety, which is nearly always present in some degree, is especially great.

I have never seen but two cases in which chloroform, carefully given, retarded the pains to any material extent. In one of these ether was well borne and did not seem to interfere with either the force or frequency of the pains. In the other case the labor pains were very feeble and infrequent before chloroform was given, and the interval was decidedly lengthened by the exhibition of the anæsthetic. In ordinary cases the pains will not be retarded at all, but are, on the other hand, not infrequently increased in strength and the interval shortened. This effect, I think, comes from the fact that the nervousness and dread of pain sometimes inhibits to some degree the oncoming uterine contraction, and again, the more complete rest which the patient has under chloroform allows for a quicker return of the contraction and likewise for greater uterine force.

If there seems any tendency for the chloroform to check the force or frequency of the pains it may be better, then, to bring the patient under its influence very slowly, and not put a fresh supply of the anæsthetic to the patient's nose at the beginning of, or during a pain, but only at the beginning of the interval, and then only enough at first to secure insensibility until the beginning of the next contraction. After administering this way for a little while it may then be given in the usual way during the pain without any inconvenience, and it will be very rare indeed that the labor will be lengthened by its use. It will far more often hasten than retard the birth of the child. This it will do by giving rest between the pains, by preventing and relieving spasmodic rigidity of the soft parts, as well as by preventing that inhibitive action of the voluntary nervous system which in the case of some very sensitive patients retards uterine contractions.

If the pains are not very frequent nor very strong, and if there is a considerable interval of freedom from all pain, in which the patient may rest or go to sleep if she wish, and, if the reflex excitement is inconsiderable, chloroform need

not be used, and would very likely retard a labor which is already too slow. In such cases the pain is seldom very hard to bear. But in the vast majority of cases, after the second stage of labor is fairly begun and the pains are severe and recurring as often or oftener than once in seven or eight minutes, and especially if there are cramps in the thighs or legs of the patient or pain in the back during the interim, or much dread of pain, then the suffering may safely and properly be very much mitigated or entirely abolished by the judicious use of an anæsthetic,—usually chloroform.

Only when the pains are very severe and nearly continuous—which is a rare occurrence—is an anæsthetic admissible early in the first stage of labor. Toward the close of the first stage, especially if the os is somewhat rigid and dilatation slow, it is frequently admissible to use chloroform. But generally such relief as may be needed during the first stage can readily be obtained by the skillful use of homœopathic remedies, exhibited upon much the same indications as in case of after pains, and other means, such as the use of quite hot douches and enemas, and hot water bottles to the spine; and I have seen relief in one case by lying with the hips elevated quite considerably. A hot sitz bath is likewise a good measure for the relief of too severe pains during the first stage of labor. The sitz bath is particularly indicated if the os is slow in dilating. To be effectual the bath must be quite as hot as can be borne, and the patient should be enveloped in blankets so as to cause profuse sweating. I suspect a good sweat, taken in the ordinary way, over an alcohol lamp, might be nearly if not quite as effectual in some cases. In this connection I wish to note that my friend, Dr. E. R. Perkins, of Excelsior, Minn., claims to have been especially successful in the relief of pain in the first stage of labor, as well as after pains, by the somewhat empirical use of hypericum from the 5th to the 30th dilution, a dose with each pain. I have not had

opportunity to test it as yet myself, but believe it worthy of trial. As to the objection, so often raised, that the use of chloroform increases the danger of post-partum hæmorrhage, there is not a scintilla of proof that such has been the fact in any case so far as I am aware. The objection is apparently wholly on theoretical grounds. I fully believe that instead of increasing it rather tends to decrease the chances of hæmorrhage, because I know it helps to conserve the strength of the patient, and the most frequent cause of post-partum hæmorrhage is from a sort of nervous and muscular exhaustion, causing a collapse of the uterine muscle. I think, if possible, that if the chloroform were injudiciously pushed toward the end of the second stage, so that a very profound anæsthesia should remain after the child was born, it might cause flooding, especially if it should continue beyond the termination of the third stage. Such a use of chloroform could not be considered cautious or judicious. It is perfectly easy to avoid any such result. I have yet to see the first case of troublesome flooding after the use of chloroform, and I have made use of it in more than two thirds of the cases I have attended for ten years. I give chloroform to every woman who wants it.

Then again there is, on the part of some physicians I know, such a dread of chloroform that they are unwilling to give it to a woman who has ever been troubled with palpitation, fearing untoward results from heart failure; and if the pulse is quick and excitable during the pains they take that as a contra-indication for chloroform, whereas the fact is that such is just the class of cases wherein the benefit from chloroform is most striking. Where the pulse is excitable and irregular I have never failed to see it quiet down, strengthen, and grow regular as soon as enough chloroform had been inhaled to deaden the keen sense of pain and dread of pain. As to the question of using chloroform in cases of mitral insufficiency, I would say that any woman whose heart is not so bad that she cannot endure

the strain of labor any way, can safely take chloroform when carefully administered. It is much safer than ether in case of acute or chronic inflammation of the kidneys, and can be used without fear on that score in case of eclampsia. It is also objected that the properly selected, homœopathic remedy is all-sufficient to relieve the pains of childbirth, to which I can but answer that if I were skillful enough in the use of the homœopathic remedies to get the relief desired by that means alone, I would not give an anæsthetic.

MANUAL DELIVERY OF THE PLACENTA IN MISCARRIAGE.

BY

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Some time ago I read a paper before one of our medical societies, with a title similar to that now under consideration, in which the following general principles were established :

1. When we have excessive hæmorrhage after miscarriage it is generally due to retained placenta.
2. When due to this cause the placenta had better be removed without delay, and not wait long for the action of remedies.
3. By the removal of the retained placenta we control the hæmorrhage.

Although these principles are several years old, and many have been the cases treated closely resembling those upon which these principles were then founded, still I firmly believe in them and have written this paper, not only to reaffirm their truthfulness, attested by time and experience, but also to suggest others equally instructive and general in their application. These, it seems to me, are amply set

forth by a single and an interesting case recently under my care. It is not usual, however, that we are warranted in establishing principles based upon isolated cases, yet the one I wish to relate is so well adapted to our purpose that it seems unnecessary to add others to avoid the appearance of inconsistency. This case is as follows:

April 1, 1890.—The patient is now thirty-eight years of age and about six months married. Eight years ago I treated her for a severe attack of cystitis, which caused firm and extensive adhesions between the bladder and uterus, and in December, 1888, for a left-vulvar abscess, which then discharged quite freely. Several times since, however, it has enlarged, but without discharging, almost disappeared, only a small bunch remaining. When distended it is quite sore and entrance to the vagina almost impossible.

These two points of the patient's previous history are brought out as having a direct bearing upon the case we are about to describe; the first, in the absence of other evidence, as having caused the whole trouble; and the second, as having somewhat complicated the operation necessary to cure the patient, and which condition still remains to be treated. On the above date, April 1, 1890, the patient complained of not having menstruated in March; morning sickness and nausea during the day. April 15, had considerable flowing. I did not see the discharge, but gave an "offhand" opinion of probable miscarriage. The case drifted into the hands of an old-school physician, who was attending a member of the family in the same house, and who was much nearer than myself, the patient being five miles in the country. He did not concur in the opinion I had given, but said that it was a case of displacement rather than one of miscarriage, and that all her unpleasant symptoms were due to the displacement. He, however, admitted the adhesion between the bladder and uterus, but said that the latter was inverted, which, of course, is not only hard to imagine, but especially untrue in the light of what I shall

soon tell you. On the theory of displacement, this physician gave her daily local treatments for two or three weeks, as she supposed to break up the adhesion and to remove the displacement.

As no improvement followed this treatment she became dissatisfied and returned to me July 10, when a thorough examination was made and the following conditions discovered: Chronic bronchitis, anæmia, and since April a constant metrorrhagia. The cervix somewhat dilated and containing shreds of membrane. At this time the abscess was in a swollen condition and entrance to the vagina very difficult. Remedies were now given for the cough and flowing until August 27, when the metrorrhagia became alarming. The family then for the first time consented to have the uterus emptied of its contents, as I had been trying to persuade them to do. The abscess was soon reduced in size and entrance to the vagina was comparatively easy, that is, so far as the abscess was concerned. I made an unsuccessful attempt to bring the cervix down to view either in Sims's or the dorsal position, owing to the adhesions previously considered and unusual hardness and rigidity of the perineum and surrounding muscles. Failing in my efforts to make an instrumental delivery of the contents of the uterus, I introduced my hand into the vagina after a very difficult procedure and my first two fingers into the cavity of the uterus, the cervix being dilated or dilatable to warrant the introduction. After resting my hand for a moment and allowing the patient to become quiet, I found the cavity of the uterus, which was very large, nearly filled with a greasy feeling substance, attached over a large portion of the endometrium. I detached it as far as possible with my two fingers, but could not reach the fundus. It was impossible to get any assistance by downward pressure with the other hand on the abdomen, because of the unrelaxed and rigid condition of the abdominal muscles. However, I removed all that I could and withdrew my hand with what I had loosened. The quantity was sufficient to fill a large

coffee cup, and consisted of a fungoid and oily substance with shreds of membrane and placenta. Both the patient and myself were considerably fatigued, as it was her first and my hardest experience of the kind, owing to her compact build and the parts never having been distended. She had flowed considerably during the operation, which lasted more than an hour. The fluid extract of ergot was then given for its mechanical effect upon the uterus in controlling hæmorrhage. At eleven o'clock the following evening,—ten hours afterward,—she was flowing terribly, had had a very hard chill, and had passed another cupful of the membrane, etc. I arrived at 12 P. M. Patient had ceased flowing. Temperature 104; pulse 90; weak and faint, severe headache, pain and restlessness, and only a slight amount of tenderness and tympanitis in the uterine region. Aconite 3x was given every fifteen minutes. In an hour the temperature was 103 and patient in a profuse perspiration. Prescription for the remainder of the night, china 2x every half hour.

August 28, 10 A. M.—Temperature 103, pulse 90, full and strong; hard headache and face flushed. She had taken two quarts of cold weak tea, besides milk, water, and beef-tea since my last visit. Had urinated and ceased flowing.

August 29.—Temperature 100, pulse 88; considerable headache and slight amount of discharge. Since last visit has passed a large quantity of membrane, etc., as before. Cough now quite troublesome; eats and sleeps well, and but little tenderness. Prescription, phos. 5x for cough, and arn. 3x for bruised uterine tissues.

August 30.—Temperature 100.5, pulse 88; passed a large clot of blood during the night, and now has an offensive discharge, for which carbolic acid injections were prescribed.

September 1.—Temperature 99.5, pulse 88; discharge continues. A new feature now appears,—that of a profuse secretion of milk. The breast pump was used for a few days, after which the breast gave no further trouble.

September 2.—Temperature 100, pulse 84 ; cold perspiration of limbs, otherwise quite comfortable.

September 7.—Temperature and pulse, normal.

September 20.—Patient discharged and perfectly well with the exception of the abscess, which, as before stated, still continues.

This case, although not unusual, except perhaps the manner in which the placenta was removed, the instrumental delivery being preferred in primipara, unless contraindicated as in this case, serves to illustrate a class of cases that will never get well by medicinal treatment alone. It was nearly six months from the time the miscarriage occurred until the patient had recovered. She had suffered greatly from the loss of blood, was therefore in a very anæmic condition, and was in danger of septic inflammation and absorption. The cause of the miscarriage was undoubtedly due to the adhesion between the bladder and uterus, thereby preventing a proper and easy expansion of the uterine tissue in the pregnant state. And finally, it seems to me, this case plainly teaches that in manual delivery of the placenta, if unable to entirely rid the cavity of all its contents, it is more than probable that the unusual irritation and the consequent stimulation caused by the hand or fingers in the uterus will be sufficient to excite contractions powerful enough to completely expel whatever remains.

MENTHOL IN PRURITUS VAGINÆ, AND ALLIED DISORDERS.

BY

E. M. HALE, M.D.

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CASE I.—Mrs. H., pregnant in the sixth month, applied for relief of a most distressing pruritus—a burning itch-

ing—at or near the urethra, aggravated at night, with intense smarting and burning during urination. Prescribed cantharis, which she took for several days with no benefit. Examination was made, and showed intense hyperæmia of both labia majora and minora.

The surface had an eroded appearance—as does the os uteri in cases of “strawberry erosion.” There was no curdy deposit on the mucous membrane, as in cases of vaginal aphthæ. Prescribed the following:

R	Menthol crystals	gr. x
	Lanoline.....	3 ii
	Benzoated lard.....	3 ii

This was applied at night. It caused intense burning and such intense reflex symptoms of the bladder, with bearing down pains, that she feared miscarriage. But in an hour or two these reflexes became less and she had the first good night's rest she had experienced for a week. After this, she did not need to apply it again, for the pruritus did not return.

CASE II.—A woman in her fifth pregnancy. Had suffered several weeks from intense vaginal and vulvar pruritus. Examination showed a copious deposit of curdy, flaky, white substance, on the vulva and half-way up the vagina. Under the microscope the characteristic fungi of aphthæ were shown. On wiping off the deposit the mucous membranes appeared as in Case I.

Prescribed injection and lavement of borax, with only temporary benefit; then sulphite of soda, which gave better results, but did not cure. Prescribed menthol, but, warned by Case I., had it prepared as follows:

R	Menthol.....	gr. xx
	Aboline.....	$\frac{3}{4}$ ss
	Lanoline.....	$\frac{3}{4}$ ss

The first application caused some burning, which soon passed off. Subsequent applications none at all; and six applications cured. I was led to the use of menthol, by my success with the formula in Case I., in a very bad case of

pruritus ani, after using almost every recommended applications for months. One application cured.

Menthol is not only a powerful parasiticide and germicide, but it has a sedative effect over intense hyperæsthesia equaled by no other drug except cocaine.

During the epidemic of la grippe I abandoned the local use of cocaine because its effects were so transient, and because of the secondary irritability of the mucous surfaces which followed its use. Instead, I used menthol by means of an atomizer (Davidson's, No. 59), 2 grains of menthol to 100 grs. of aboline. This was thrown up the nostrils until the spray was felt trickling down the posterior nares to the fauces. It relieved the irritation of the nasal mucous membranes better and more permanently than anything else. It also relieved the headache, irritation of the eyes, and the cough.

Care should be taken that none of the spray goes into the eyes. But in one case, where the patient complained of intense itching in the ears, a little of the spray thrown into the external auditory canal gave prompt relief.

In hay fever it gives better results than any other application. In certain obstinate coughs, due to irritation of the peripheral nerves of the larynx and trachea, a spray of menthol inhaled, gave quick relief.

TOTAL OCCLUSION OF VAGINA FROM SPECIFIC INFLAMMATION IN EIGHTH MONTH OF PREGNANCY.

BY

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The patient was admitted to the Home in the eighth month of pregnancy—from the City Hospital, where she

had been three weeks. She remained in the Home, at that time, two and one half weeks. The first week she made no especial complaint, therefore I made no examination. The second week, she suffered so much pain I made an examination, or, more correctly speaking, attempted to, and found, almost one inch up the vagina, a total occlusion, formed by an adhesion of the vaginal walls, making a tough and unyielding arch. There was also an accumulation of warty excrescences around the orifice of the vagina,—and such intense soreness of the vagina from ulceration that any more extended examination, without an anæsthetic, was impossible. If any one has come across a similar case of unmistakable pregnancy with *complete closure* of the vagina, it will not be difficult for such an one to imagine my surprise to find such an obstacle. I thought at first I must be mistaken. I telephoned to the hospital physician to inquire what his experience in the case had been. His reply was, “No occlusion at all; os well defined.” His examination preceded mine by only three weeks. As this was only the commencement of the ninth month, I thought I would decide what to do after thinking the matter over a little longer. But, very suddenly, genuine labor pains set in, and immediate action was necessary. Anticipating more trouble than usual, and our nurses being worn out with previous duty, I took her, in a carriage, back to the hospital about 6 P.M. We were then able to break down the adhesions with the fingers, the membranous vault having become stretched and thinned during the pains and ride. I left her in charge of the hospital physician, who was obliged to deliver her instrumentally about 4.30 A.M., there being almost entire want of uterine tonicity; and the perineum tore like paper. It was immediately repaired and healed rapidly and well, so that she returned to the Home in three weeks. She continued to do well for a time, then commenced an alternation of specific sore mouth with looseness of stools and unbearable pain and soreness of rectum.

The past month she has been back in the hospital, where she is being treated with the usual allopathic treatment with apparent improvement. From investigation I find that the specific taint was contracted at about seven and one half months. No adhesions were formed until about six weeks later, but when they commenced they formed thoroughly and rapidly—becoming *total* in less than three weeks.

Others may have met similar cases, but as I have been unable to find any record of such, I thought it might be of interest to report this one.

AUSCULTATION IN OBSTETRICS.*

BY

A. AUVARD, M.D.

SUMMARY.

Generalities.—Historical.

Preliminaries.—Study of each sound in particular.

a. Mother :

1. Maternal souffle.

b. Fœtus and annexes :

2. Fœtal heart-sounds.

3. Fœto-funicular souffle.

4. Sounds of fœtal movements.

1817.—Mayor (of Geneva) heard the sounds of the fœtal heart, but his discovery remained unnoted.

1819.—Laennec published his "*Traité d'auscultation médiate*," which revolutionized the whole study of thoracic semeiology.

1821.—Descending from the thorax to the gravid abdomen, Lejumeau de Kergaradec, without knowing of the observation of Mayor, perceived that the ear applied in the

* Translated for the HOMŒOPATHIC JOURNAL OF OBSTETRICS from Dr. Auvard's new work on Obstetrics.

vicinity of the uterus heard the maternal souffle and the rapid pulsations of the foetal heart.

1847.—Depaul published his "Traité théorique et pratique d'auscultation obstétrical," completed since by a series of interesting works, among which I will cite especially those of Kiwisch, 1851; Verardini, 1873; Glenard, 1876; Kehrer, 1877; Ribemont, 1878; Cantacuzéne, 1884; Trachet, 1888.

From these different works it has been learned that on applying the ear on the abdominal wall of a woman arrived toward the term of pregnancy, one can hear four kinds of sounds:

- | | | |
|--------------------------------|-------|----------|
| 1. A maternal souffle, | . . . | Mother. |
| 2. A foetal double pulsation, | . . . | } Fœtus. |
| 3. Fœto-funicular souffle, | . . . | |
| 4. Sounds of foetal movements, | . . . | |

Before beginning the study of these sounds, some preliminary words on the mode of practicing obstetrical auscultation will be useful.

Preliminaries.—The woman should be placed in the same position as for palpation (or better *left* in this position), since digital exploration and auscultation generally follow palpation. The accoucheur remains likewise on the right side of the woman, but may change sides to complete his examination.

Auscultation is either immediate or mediate: *Immediate*, when the ear is directly (or better, with the linen or the chemise intervening) applied to the abdomen. *Mediate*, when a stethoscope is interposed between the ear and the abdomen. This last method is generally preferred, as less offensive to the woman's modesty and as furnishing clearer and more exact results.

The choice of a stethoscope is not a matter of indifference; those employed for the thorax are not so favorable for obstetrical auscultation. The essential condition of a

good obstetrical stethoscope is that it shall have a very large bell, for example, like that represented in Figure 1.

MATERNAL SOUFFLE.—The maternal souffle presents several important characteristics:

It is *intermittent* and synchronous with the pulse of the woman. If the uterus is auscultated at the same time that

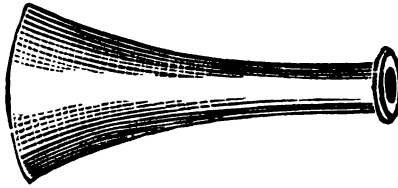


FIG. 1.—Bell of Obstetrical Stethoscope.

the finger explores the radial artery, at the moment the pulse is felt at the wrist the ear hears a sound which occupies a duration of one quarter, one third, or one half of a cardiac revolution.

Its *timbre* is variable; sometimes acute, sometimes grave, sometimes musical. It may be situated at any point of the uterine surface, but is heard most often over the sides, or at the border of the insertion of the broad ligaments. Its

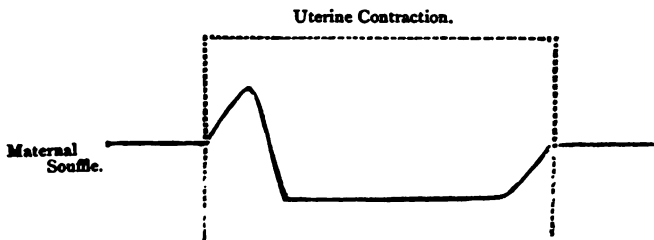


FIG. 2.—Evolution of the Maternal Souffle during Uterine Contraction.

site is sometimes single, sometimes double, sometimes multiple. When following uterine contraction, it undergoes an augmentation of intensity, then sinks below normal, to resume its first intensity when the contraction is ended. These variations are put in schema form in Figure 2.

This souffle appears generally at the beginning of the

second three months of pregnancy, augments up to the commencement of the third three months, when it attains its apogee, and decreases from this time (Fig. 3). Different

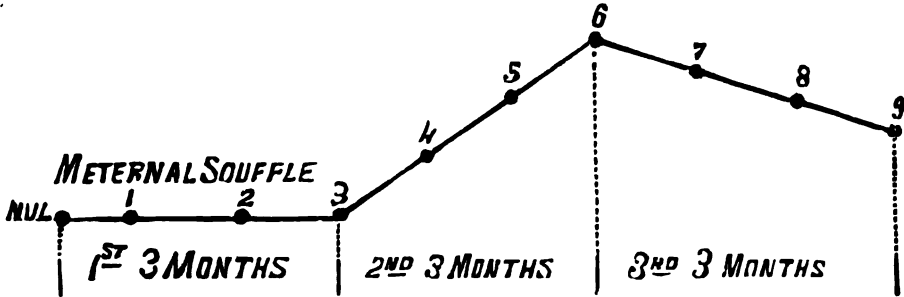


FIG. 3.—Evolution of the Maternal Souffle during the different Months of Pregnancy.

theories have been invoked to explain the production of this sound; the schema Fig. 4 will recall the place of origin of the souffle in question and facilitate memory.

1. *Aorto-iliac theory*.—Hans, Bouillard.—The souffle is

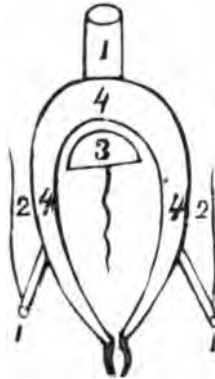


FIG. 4.—Schema of the different theories of the Maternal Souffle. 1, Aorta and its Branches; 2, Epigastric Arteries; 3, Placenta; 4, Uterine Wall.

produced in the aorta and the iliacs compressed by the uterus.

If this were so it would be impossible to hear the souffle at any point of the uterine surface notable above the pubes, where it often is.

2. *Epigastric theory*.—Kiovisch, Glenard.—These two authors have localized the maternal souffle in the epigastric arteries.

The objection made to the preceding theory applies equally to this and demonstrates its untruth. Glenard has, besides, abandoned his theory, placing in the puerperal artery that which had formerly been attributed to the epigastric; the puerperal artery being a dependent of the uterus, this author is thus ranged in the uterine theory, which will be exposed later.

3. *Placental theory*.—Laennec, Monod.—The possibility

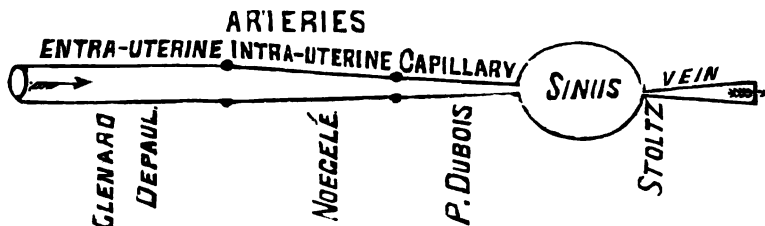


FIG. 5.—Schema of the Uterine Blood-vessels: Artery, Capillary, Sinus, Vein.

of having two or three distinct spots where the maternal souffle can be heard invalidates this theory.

4. *Uterine theory*.—P. Dubois.—This is the generally admitted theory, localizing in the vessels of the uterus the origin of the maternal bruit or souffle; thus it is often called the *uterine* souffle. But, though in accord on the principle, authors differ as to what variety of vessels is involved. The schema Fig. 5, represents the succession of uterine vessels showing the divisions, and the authors cited have been placed opposite the variety of blood-vessels advanced as a cause.

A physical law proves that a sonorous sound is produced when a fluid circulating in a tube passes from a narrow region into an enlargement; this law demonstrates that P. Dubois is correct in supposing that the maternal souffle arises at a moment when the blood empties from the capil-

laries into the sinuses. Besides, it is not impossible that the other uterine vessels compressed accidentally by the stethoscope, by a tumor, by a foetal part, or by any analogous cause, may be equally the source of a maternal bruit.

The maternal souffle, then, takes origin in any point of the uterine blood-vessels, but preferably at the union of the capillaries with the sinuses.

FŒTAL HEART SOUNDS.—When practicing auscultation of the foetal heart, the sounds of which have been compared to the remote ticking of a watch, there is heard (Fig. 6):

1. A first sound, tolerably strong.
2. A short silence.
3. A second sound, more dull.
4. A long silence.

The foetal heart beats on the average 140 times a minute;



FIG. 6.—Sounds of the Foetal Heart.

one will hear, then, the double sound in question 140 times a minute. The number of pulsations being about 70 in the adult, it will be seen that they are double this number in the foetus.

The number of foetal pulsations may present quite extensive variations:

Physiological limits { Maximum, 160.
Minimum, 120.

Pathological limits { Progressive diminution, 100, 90, 60, etc., to foetal death.
Augmentation to 190, 200, in case of intense fever of the mother.

During uterine contraction, the frequency is exaggerated momentarily at the beginning, then diminishes sometimes to such a degree that the ear perceives no sound. The obstetrician should not forget this peculiarity, which may lead to a belief that the condition of the foetus is serious, when there

is only a passing modification. Fig. 7, in schematizing the variations of the foetal heart sounds during uterine contraction, shows the analogy with that taking place in the maternal bruit (Fig. 8).

During the first three months of pregnancy, it has never

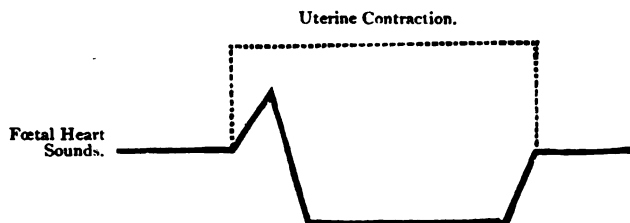


FIG. 7.—Evolution of Foetal Heart Sounds during Uterine Contraction.

been possible to hear the foetal heart sounds. Exceptionally they can be perceived during the fourth month, but more often during the first half of the fifth month; it is in general, however, at about the middle of pregnancy that they become distinctly perceptible; their clearness progresses to

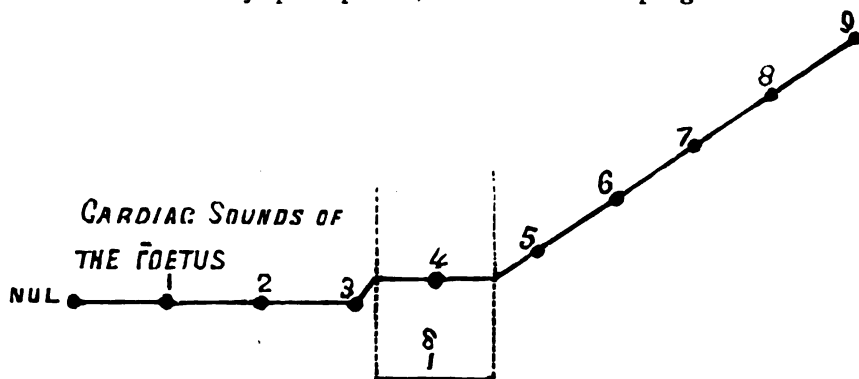


FIG. 8.—Evolution of the Cardiac Sounds of the Foetus during Pregnancy.

the end of gestation as in the schema, Fig. 8, which sums up what we have said.

The perception of the foetal heart sounds permits us to affirm the *existence of pregnancy and that the foetus lives*. However this sign may be attached to certain causes of

error; thus the maternal cardiac pulsation transmitted to the abdomen may be mistaken for the foetal heart sounds. To avoid this confusion it is sufficient to explore the maternal pulse while auscultating the mother; the synchronism indicates the maternal origin of the sounds. From this comes the very important precept: Never auscultate the foetus without taking the maternal pulse at the same time. In difficult cases, the obstetrician who fears a confusion with the throb of his own arteries (arteries of the head, in particular the temporal) will avoid all source of error by taking his own pulse simultaneously. These causes of error, it is seen, are very easy to avoid, and hence the excellence of the foetal heart sounds as a positive sign of pregnancy. The perception of these sounds permits, besides, a watch over the life of the foetus, and during labor furnishes the physician important knowledge as to the necessity of prompt intervention when a life is in danger.

It has been pretended also that by the aid of auscultation one could recognize during pregnancy the *sex* of the foetus. In 1859 Frankenhauser advanced the following relation: More than 144 pulsations, to the minute, a girl; less than 144 pulsations, a boy. Taking up this question again in 1879 Danzats modified the preceding conclusion. More than 144 pulsations to the minute, a girl; less than 135, a boy. Danzats created thus between 144 and 135 pulsations a neutral zone where diagnosis was impossible. From the researches of Budin and Chaignot, made the same year, it resulted that these figures had no utility in practice, and that it is necessary to renounce all ideas of diagnosing the sex of the child during pregnancy by auscultation or by any of the other means proposed to this end.

Finally, foetal auscultation permits us to verify the *diagnosis of the presentation and position* made by palpation, and this study will terminate the subject of foetal heart sounds. The sounds of the foetal heart are heard within a zone more or less extended on the abdominal wall, a zone which rep-

resents a circle of 10 to 15 centimetres diameter. In proportion as the ear or stethoscope is approached to the center of this circle, the sound becomes clearer and stronger. This region, where the heart sounds are particularly clear, is called the *focus of auscultation*. This focus is usually single, however, as will be seen later in a simple pregnancy, it may be double, as in the case of twins. The foci of auscultation will vary with the situation of the foetal heart ; that is each presentation and position will have its special focus. Let us study these different foci by commencing with the presentation of the cephalic ovoid.

I. VERTEX.—I will suppose the summit engaged in the

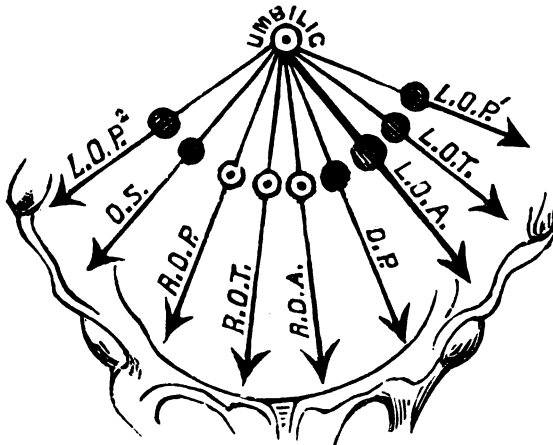


FIG. 9.—Vertex.—Foci of Auscultation.—Stethoscopic Fan.

excavation (we will see later that the height of the focus of auscultation varies with the degree of engagement). I use as a diagram a series of lines which take the umbilicus as a starting point and dispose themselves in a fan shape to the different points of the pelvis, as follows (*id.* both sides):

Antero-superior iliac spine.
Antero-inferior iliac spine.
Ilio-pectineal eminence.
Pubic spine.

Superior ilio-umbilical line
Inferior ilio-umbilical line.
Umbilico-pectineal line.
Umbilico-pubic line.

Total : eight lines.

It is on the paths of these eight lines that we find the foci of auscultation of the eight positions of the vertex.

Schema 9 represents the site of the different foci of auscultation at the point where each one interrupts a line; the name of the position is given at the side.

It will be remarked that for L.O.P. there exists two foci. This is the only position where this peculiarity exists. The line on which is seated the left focus is found above the left superior ilio-umbilical. (Supplementary line.) In

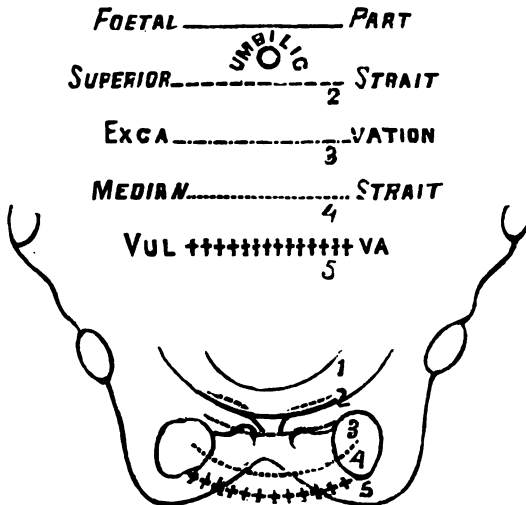


FIG. 10.—Height of Foci of Auscultation varying according to the Degree of Engagement of the Foetal part. (The inferior lines indicate the height of the Foetal part which presents and the superior analogous lines the height of the Foci of Auscultation which corresponds to them.

proportion as the back of the foetus turns posteriorly the right focus becomes more and more clear, and, on the contrary, it is that of the left that becomes louder when the back is directed forward, approaching L.O.T.

To reconstruct this schema from memory it is sufficient to recall that the focus of L.O.A. (the line of which is expressly accentuated) is found on the left inferior ilio-umbilical line.

What has been said applies to cases where the vertex is engaged in the excavation; but what is the site of the different foci when engagement has not taken place or when, on the contrary, the head has arrived at the vulva. Fig. 10

responds to this question; it is destined to show the relative height of the foci of auscultation, following the degree of engagement of the foetal part, the upper black line corresponds to the foetal part free.

These different heights being known it is sufficient to return to Fig. 9 and transport, parallel to itself, each of the foci, either upwards or downwards, according to the degree of engagement; thus we will have the successive positions

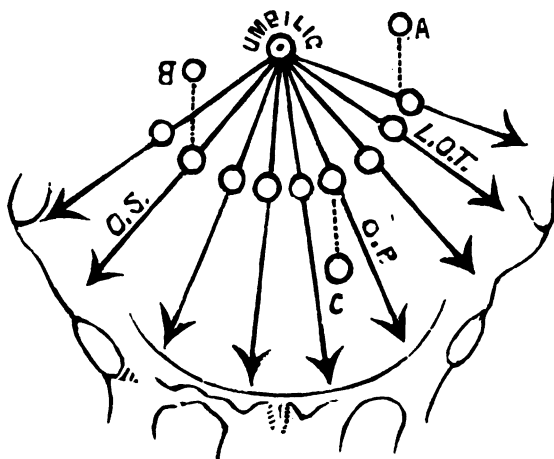


FIG. 11.—Vertex. Variations in the Height of Focus of Auscultation according to the Degree of engagement of the Foetal part.

occupied by the foci during the successive descent of the head.

Examples (see Fig. 11):

In L.O.T., head mobile above the superior strait, the focus will be in A.

In O.S., head fixed at superior strait, the focus will be in B.

In O.P., head at the vulva, the focus will be in C.

2. FACE.—I proceed likewise for the determination of the foci in the positions of the presentation of the face, supposing that labor is advanced so that the foetal part is in

the excavation. The stethoscopic fan is given in Fig. 12. The mnemotechnic mark here is the L.M.A. line, the same as L.O.A. for the vertex. The R.M.P. is here analogous to L.O.P. as to a double focus, for the cardiac region of the foetus is equally distant, right and left, from the abdominal wall. Although this double focus has not been described, it is probable that it exists and for my part I have been able to recognize it in a similar case. With regard to the height of these different foci, according to the degree of engagement, I return to what has been said of the vertex

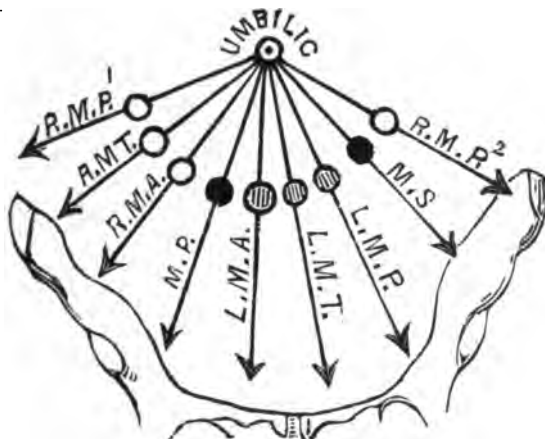


FIG. 12.—Face. Foci of Auscultation. Stethoscopic Fan.

Fig. 10 applies as well to presentations of the face as to those of the vertex.

3. FOREHEAD.—The different foci of auscultation in presentation of the forehead are not sufficiently known to allow me to touch upon their description. They demand new study. Each presentation of the forehead being intermediate between a presentation of the vertex and of the face, one can take a point situated on the middle of a line reuniting the two foci of corresponding presentations and approximately fix the site of the one sought.

4. BREECH.—I suppose the breech engaged in the exca-

vation, the foci are disposed in a fan (Fig. 13) analogous to those of the face and vertex. For R. S. P. I have marked two foci of auscultation which exist probably as in L.O.P. or R. M. P., but this fact has not been verified. The line L. S. A. is that from which the fan can be reconstructed from memory. With regard to the height of the foci, I will repeat that which has been given for the vertex and face, for since the researches of M. Ribemont, it has been shown that on a fœtus doubled on itself, as it is in the uterine cavity, the heart is equally distant from the vertex and from the breech; the height of the focus of auscultation

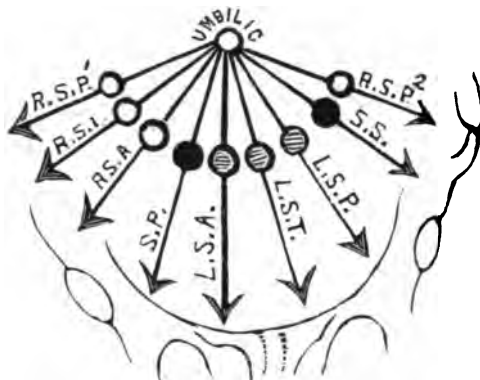


FIG. 13.—Breech. Foci of Auscultation. Stethoscopic Fan.

will be, then, the same for the vertex and for the breech for equal degrees of engagement. Presentation of the breech being very rarely accompanied by engagement during pregnancy, it will be understood that the foci of auscultation will be found in parallel circumstances above the umbilicus.

5. THORAX.—Shoulder presentations other than the varieties of the right or left shoulder being rare, we have only at present determined the foci for these two varieties, and in their two most usual positions, that is the right and the left acromio-iliac transverse, R. A. T. and L. A. T. Fig. 14 illustrates the foci of auscultation in these different cases. In place of a fan we have a stethoscopic square.

6. ABDOMEN.—The great rarity of these presentations has not yet permitted us to determine the foci of auscultation.

Besides the engagement of the foetal part, there are other causes which may cause variation in the situation of the foci of auscultation, such as *lateral inclination* of the uterus, or, again, *anterior inclination*, which, for example, notably lowers the focus in L.O.T., when it is pronounced. All these variations are complications, but the physician should never forget their possibility, in order to keep in mind cer-

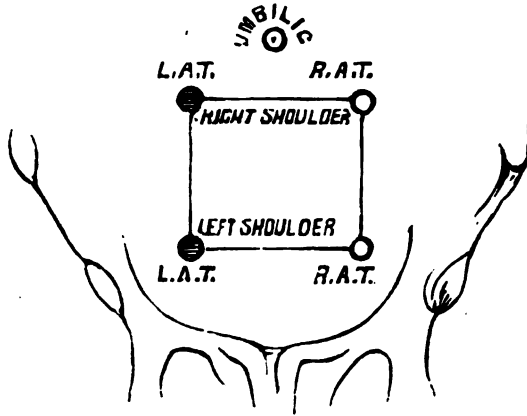


FIG. 14.—Thorax. (Variety: Shoulder.) Foci of Auscultation. Stethoscopic Square.

tain apparent anomalies, the details of which are too extended to produce here. The knowledge of the preceding foci as described is not sufficient alone for diagnosis of presentation and position, but it permits us, diagnosis being first made by palpation, to obtain verifications by the aid of the ear and enables the assurance that the focus is placed in the situation indicated for the supposed presentation and position. A focus placed in another region puts one on the track of an error committed and leads to the necessary rectification.

FŒTO-FUNICULAR SOUFFLE.—At the same time with the

foetal heart sounds, there is sometimes heard a blowing sound, usually single, exceptionally double. This *souffle* differs essentially from that previously studied (maternal *souffle*), and is easily distinguished from it, for the first is synchronous with the pulsations of the mother, the second, with the foetal pulsations.

The foeto-funicular *souffle* recognizes, as its name indicates, a double origin: Either the foetus, cardiac (heart) *souffle*; or the cord, funicular (vessels) *souffle*. The *cardiac souffle* of the foetus is due either to a lesion of the valvular orifices, as in adults; to an insufficient permeability of the foramen ovale; or, with a normal heart, to modifications in the blood, producing sounds analogous to those which are designated under the name anæmic in the adult, and the pathology of which is still unknown.

The *funicular souffle*, exceptionally caused by the semilunar folds which exist in the umbilical vessels, is generally due to compression of the cord either between the back of the child and the uterine wall, or by circular constrictions. Charrier, in making of this *souffle* a sure sign of circular constriction of the cord, has been much too positive, and is badly inspired in proposing premature artificial labor in such cases to save the life of the child.

We do not possess exact and sufficient symptoms to enable us to recognize the different varieties of foetal cardiac *souffle*, so that all the ambition of the obstetrician should be confined to distinguishing a foetal *souffle* from a funicular *souffle*, and yet this diagnosis is not always possible. The cardiac *souffle* has its maximum of intensity at the focus of auscultation of the foetal heart, and, on the contrary, the funicular *souffle* has its maximum of intensity situated at a different point, in the region of the cord. This sign is that which will better permit the differentiation; those distinctions which are based on the intensity or the variability of the murmur furnish only an incomplete security. The foeto-funicular *souffle* has, in the point of view of the exist-

ence of pregnancy, the same semeiological value as the foetal heart sounds,—it indicates the presence of a living foetus, but its importance is very small compared with the existence of the foetal heart sounds, so clear and easy to find.

SOUNDS OF FŒTAL MOVEMENTS.—In practicing auscultation during a certain time there is perceived sometimes a *rustling*, analogous to that produced by the two hands applied on the ear, when a slight movement is given to the outer one. Sometimes a *shock* is heard, sudden and dull, like that obtained when striking with one finger on the hand covering as before the pavilion of the ear. Occasionally these shocks take a peculiar regularity, as if the foetus pulsed slowly in the interior of the ovular cavity (*rythmic movements*). The rustlings are due to the displacements of the foetus in totality; the shocks, to movements of small foetal parts which strike the uterine wall; the cause of the rythmic movements is ignored, besides they have no special semeiological value. The sounds of foetal movements commence with the movements themselves, that is, at the beginning of the fourth month of pregnancy, but they are not clearly perceptible until about the middle of the fourth month. Like the foetal heart sounds, they constitute a positive sign of the existence and the life of the foetus. However, it is important not to confuse them with intestinal sounds, nor with the shocks which abdominal muscular contractions may give to the stethoscope. These causes of error can only be avoided in the second half of pregnancy, when the perception of the foetal shock has become clear and distinct; but at this time this symptom, which would be important if unique, generally loses its advantages by the appearance of other signs of pregnancy more easily appreciated.

DOUBLE PYO-SALPINX.*

BY

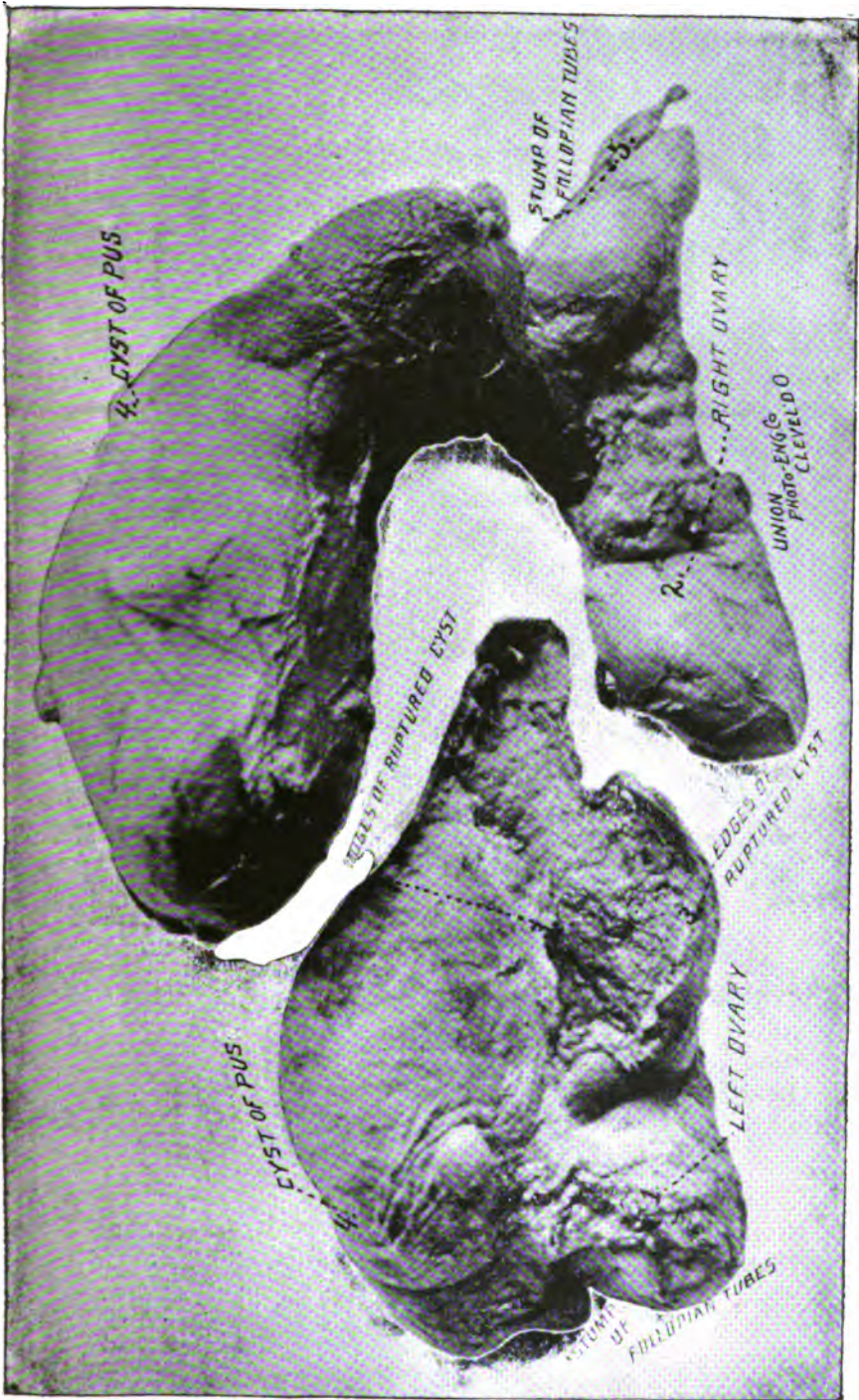
H. F. BIGGAR, M.D.,

CLEVELAND, O.

Many cases of diseases of the fallapian tubes have been under my notice the present year, and being treated according to improved methods, to which must, of course, be added the benefits of antisepsis and improved methods of diagnosis, and some degree of success has been attained—in many cases most remarkable. The following case and description, coupled with the accompanying plate, will I think make the history and result plain.

Miss V., aged twenty-three; American; dressmaker. Consulted July 30, 1890, in regard to a "lump" in her side, which she called a "rupture," giving the following history. About three years ago, during menstruation, while lifting a tub of water, was seized with great pain and faintness, felt as if something "gave way," had to lie down, kept the bed several days, but gradually grew better. Each succeeding menstrual period became more painful, when about eight months after she noticed a small lump in the right inguinal region, painful to pressure, slightly movable. About this time complained of constant chilliness in forenoon and heat in afternoon, and consulted an allopathic physician, who diagnosed the case as hernia and at once proceeded to adjust a truss! This she wore over a year with much discomfort. Had a temperature at the time of consulting of 101.5 degrees; pulse 115. Very nervous, some night sweat; much reduced in flesh; no appetite. On bimanual examination find growth attached to ovary, and movable as uterus is moved. August 29 consulted me, when it was arranged to operate for removal September 3.

* With plate.



PYO-SALPINX CASE.

Much care was instituted to get the condition into a sufficient state to bear the necessary shock, and to give the sufficient energy to warrant convalescence after a radical operation.

Upon examination, found disease of both ovaries and tubes. The operation of ovariectomy and extirpation of tubes was carefully carried out, and the result, I think, clearly demonstrated the diagnosis made, as on ligation the left ovary was found in an inflammatory state, encysted as well as its tube, thus placing the ligature near the uterine extremity. By reference to the plate the condition of the two cysts can be readily noted; the wall of the left cyst was much softened at 3, so much so, in fact, as to allow an outbursting and infiltration of the purulent contents of the sac. Small nodules were noted on its surface and the fibrous wall was quite firm and elastic in a great portion of its extent.

The right ovary was in a state of degeneration, and, like its fellow, showed the presence of ovarian cyst in an early stage of development, and was alike removed. One characteristic was present in the right ovary—that of the length of the stump of the fallopian tube to which the cyst of pus was attached. The cyst was more regular in outline, showing a stage of development somewhat earlier than its fellow, being in the main also less nodular, and the cyst firmer in structure. The operation of Tait's, with some modifications, has been found most efficacious and preferable to that of either Batty or Hagar, as all portions of the tube, even to the tissue of the fundus, in contact, are so infiltrated and congested, if not fully diseased, that the proper means are both radical and thorough as regards the removal of diseased portions of the genitalia. Proper antiseptic precautions were strictly carried out in this particular case, both in the first and the after dressings.

The case convalesced nicely. This is evidence of the strong fact that an early operation thoroughly done is the

most efficient measure in case internal medication does not promptly combat the grave symptoms.

When the symptoms are all taken into account, salpingitis in any of its stages ought to be easily diagnosed. When the evidence of colicky pain is observed, together with the signs of the formation of pus, colocynth has been most efficacious, as well as aconite and hepar sulphur, sillicia, and mercurius.

In all cases rest is a good preparatory treatment coupled with internal medication, to be followed when allowable by the operation which, as before stated, is the best and promptest relief.

Many cases of obscure origin, as well as laden with obscure symptoms, are brought before the eyes of the surgeon, and in such cases more evidence is necessary to warrant the use of the knife as an opening of the road to assistance, if not a cure. But when the pyo-salpinx is clearly diagnosed, moreover encysted to any extent, operation ought to be, and by the elegance of details and results attained seems surely warranted.

CLINICAL OBSERVATIONS BASED ON OVER FOUR HUNDRED ABDOMINAL SECTIONS.

BY

R. LUDLAM, M.D.,

CHICAGO.

(Continued from vol. xii., p. 529.)

The Incision.—On receiving copies of the first edition of Peaslee's and of Atlee's works on ovarian tumors and ovariectomy in 1872, one of the subjects that most interested me was what they had to say of the proper length for the abdominal incision; for there had already been a great deal

of discussion of this matter, and ovariologists were ranged into two camps, those who always laid open the abdomen from the sternum to the symphysis pubis, and those who made as short an incision as possible for the extraction of the tumor, as Dr. Nathan Smith did in 1821. As usual, in so far as they applied either method to all cases indiscriminately, both parties were in the wrong and a deal of mischief had resulted.

Since that time we have learned why an unvarying course in either of these respects is beset with danger to the patient. The old surgical idea that a free cut was necessary because it allowed "every part of the operation to be done by sight" often exposed the abdominal contents unnecessarily, and sometimes resulted in rupture of the cyst or cysts, an accident which added the risk of sepsis to those of chill and of shock. Without being savage in my surgical proclivities, I was an advocate for the long incision until 1874, when I exposed a large monocyst, which undoubtedly was parovarian, through an incision that was about nine inches in length. This opened my eyes to the wrong of it, and, although my patient recovered, she had to pass through the so-called "suppurative period" of those days with a wound that need not have been larger than a big button-hole.

In the case of solid and composite tumors, as well as of multilocular cysts of the ovary, the section should be so free as to admit of the extraction of the growth without straining the wound or bursting the sacs, and so emptying their contents into the abdomen. Nothing is gained and a great deal may be lost by the opposite course. For this reason, in the removal of large uterine fibroids, of condensed cysts, and of the uterus in supra-vaginal hysterectomy, the incision should be long enough to enable us to work easily and not to be embarrassed by having to force the growth through too small a wound.

If it were still necessary that every part of the operation should be "done by sight," the removal of the uterine ap-

pendages, as in the Battey-Tait operation, would now be almost as fatal as ovariectomy used to be; and we would not be warranted in taking any such risks for the relief and the radical cure of the various forms of salpingitis, recurrent peritonitis, and even of the apochryphal cellulitis and abscess, as is being done every day by those of us who, while we sometimes work in the dark, are privileged to walk in the light.

Besides, since the exploratory incision has been legitimized, we have the option of beginning with a small opening and ending, if necessary, with a large one.

Concerning the length of the incision, therefore, my experience has brought me to favor the long one for large and solid, or semi-solid and irreducible growths; and the medium or the short one for such tumors as are small, monocystic, tubal, and for a majority of those which are parovarian, intra-pelvic, and intra-ligamentous. Where one is in doubt it is better to make a small opening first, and if need be to enlarge it afterward. If the abdominal wall is very thin because of its distension and of a general emaciation, access to the tumor is so easy that the cut does not require to be so long as where the parietes are thick and there is a great deal of adipose tissue.

I have learned that there is increased safety in making the incision of the same length through all the layers of tissue, the integument and the peritoneum included. And I am fully convinced that the old way of slashing through these textures, as the army surgeons used to cut to the bone with their first stroke in amputating a leg or an arm, is to be deprecated most decidedly. By avoiding this meretricious and mischievous practice I am happy to say that, although I have often cut down upon them, I have never yet injured the bladder or the intestines in the slightest degree.

It is my firm conviction that the old method of reducing the size of a multilocular tumor of the ovary by first emptying one cyst and then breaking through the partition walls

so as to empty others through it, was, and is likely to be a fertile source of sepsis whenever it is practiced. It is much safer after having tapped the parent cyst and closed its mouth with a trusty pair of lock forceps to enlarge the abdominal incision and take it out whole. Even if the cyst-wall is rotten, this is the better way; for, where there is danger of rupture, we can turn the patient, tumor and all, upon her side and let the vicious contents run over the table and not into the abdomen.

My practice has been to hasten slowly in gaining access to the peritoneal cavity, because by so doing there is less danger of wounding the underlying organs, and because the hæmorrhage can be arrested as we proceed, and a consequent sepsis averted. In filling the last of these indications nothing has given me such satisfaction as the application of hot sponges and sponge-pressure to the sub-cutaneous tissues before cutting through them. Where the structures are not venous this expedient is a sort of Esmarch's bandage, that reduces the loss of blood to the minimum, and in many cases even does away with the need of catch-forceps. Only those of us who were once obliged to seize the little vessels singly with the stupid old forceps, and to stop the bleeding by ligature or torsion, before the days of hæmostasis by hot water, can fully appreciate the advantages of this simple method.

In this way it is not so very important that the central, or usual incision, should be made through the linea alba; and where we have to reopen the abdomen in a second operation, or in cutting for the cure of a ventral hernia, this is no small advantage.

In five of my cases the abdomen was so very large and the consequent pressure of the tumor so great that the patient could not lie upon her back. Under the circumstances it was not safe to administer the anæsthetic either in the usual way or in the sitting posture. The patient was therefore placed as carefully as possible upon her side,

and partially anæsthetized, a small incision was hastily made, the cyst tapped and the mouth of it dragged out and secured, so that none of its contents could escape. After this double precaution, she was turned upon her back and the operation finished in the usual way. This plan I have found to be much safer than to tap the cyst through the abdominal parietes some hours or days before its extirpation, as Kœberle and other continental surgeons used to do. Although four of these five cases had carried the tumor through more than six years each, and one of them for twenty-eight years, they all recovered.

In making the abdominal incision in certain cases there are two conditions which, like the red light in a druggist's window, signify danger. One of these is an extraordinary tendency to venous oozing and hæmorrhage, and the other is a dropsical condition of the parietes, in which a flow of water follows the knife. This hæmorrhagic tendency is, in my experience at least, a pretty certain sign of malignancy in the tumor. I am not speaking of the occurrence of hæmorrhage from the large veins which can be seen and avoided, or pinched on either side of the line of incision with a Péan's forceps before being cut, but of the bleeding that is general throughout the wound and which does not promptly respond to the action of the hot water, or if it ceases for a little, comes again and continues until the wound is finally closed.

The abdominal anasarca may be due to the long-continued pressure of a large fibroma, or of an unusually large tumor of any kind. If it is not attended by renal embarrassment with albuminuria and scanty urination, or confirmed Bright's disease through pressure upon the renal vessels and the ureters, it still may be a sign of very low vitality and of great exhaustion. Such symptoms are not necessarily mortal, for some of these patients do finally recover, but I have come to regard them as very suspicious and suggestive.

In some of the smaller tumors that occupy the lower part of the abdomen and the pelvis, as well as in making an operation for the removal of the uterine appendages, it is necessary to cut through a very thick abdominal wall. This condition necessitates a relatively larger incision than is required when there is less fat and the parietes have been atrophied by pressure from within.

(To be continued.)

ON THE FUNCTIONS AND LESIONS OF THE FALLOPIAN TUBES, IN THE LIGHT OF MOD- ERN GYNÆCOLOGY.

BY

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(Concluded from page 538, November, 1890.)

TUMORS, NEOPLASMS AND INFLAMMATORY LESIONS OF THE FALLOPIAN TUBE.

First in the order of frequency come inflammatory lesions of the tube. These have been observed, figured, and described by the older pathologists at intervals for the last two centuries, and yet so little were their observations considered, that these had fallen into oblivion until the revival of successful abdominal sections. Even so recently as 1881, the existence of such conditions, except as extreme rarities, was publicly scoffed at by the then leading English gynæcologist. All the standard text-books, up to a couple of years ago, spoke of them as insignificant, uncommon, or unknown. And yet a mass of literature and exact observation was accumulating in Europe and America during the decade, demonstrating to conviction the frequency and the

gravity of these pelvic disorders. The real secret of so much ignorance and so much baseless denial was the inability to perform an accurate bimanual. I have seen, while in Vienna, the professor, after a careful bimanual, sketch in each case the relative position, direction, and contour of the whole pelvic contents. Such developed *tactus eruditus* as this would have saved many reputations in and out of England. And only among those who by the most painstaking assiduity have achieved a degree of perfection in this mode of procedure are the secrets of the pelvic excavation cognizable.

Lesions of the tube, the direct result of acute or chronic inflammatory processes, begin in the vast majority of cases in the inner mucous lining of the tube. And curiously, some form of specific inflammatory process is usually the initial feature. The septic inflammation of post abortional or post parturient lesions travels up the mucous lining of the tube, in continuity with the inflammation of the uterine inner coat; the lining epithelium is destroyed, the subjacent tissues are affected to a varying depth, and the process extends by direct continuity through the open end of the Fallopian tube into the peritoneum of the pelvis. Many exanthemata are characterized by pelvic lesions of a precisely similar nature, especially small-pox and scarlatina, and many an obscure pelvic trouble, or an early climacteria may be traced to an overlooked pelvic complication occurring in an exanthem after puberty. But by no diseased process is tubal inflammation so certainly or so constantly caused as by gonorrhœa. Often with no very marked early symptoms the tubes finally become the permanent seat of gonorrhœal crippling. Beginning with a catarrhal inflammation of the tubal lining, the epithelial coat is cast off and the proliferation of granulative tissue underneath predisposes to adhesion of the tubal walls at different sites. The infiltration of leucocytes into the muscular layer eventuates in a loss of tone which arrests the vermicular move-

ments of the tube. The loss of peristaltic muscular movements, the irregular adhesion of opposed walls of the tube, together with the presence of the catarrhal process necessarily terminate in the formation and retention of secretion, the distension of the tube, and the establishment of a cystic tumor.

The extension of the process through the open end of the Fallopian tube brings about an inflammation of the pelvic peritoneum, whose clinical features mainly agree with pelvic peritonitis, not beginning in the tube, but starting as a primary serous affection. One marked clinical point may be mentioned: that inflammation of the pelvic peritoneum secondary to inflammatory affections of pelvic viscera, very seldom causes general peritonitis; the virulence is almost always limited to the pelvic serous membrane.

However induced, whether primarily or secondarily, inflammation of the serous covering of pelvic viscera is even more disastrous in its results than the same process beginning in the mucous membrane. What is the natural history of the process? From the primary irritation of tubercle, or the poison of acute rheumatism, or the secondary sepsis of gonorrhœa or abortion, an active inflammation is excited in the serous membrane, a large quantity of plastic effusion, with or without pus, is poured out, and all the pelvic organs are fused, matted, welded together as though plaster of paris had been poured among the organs in the pelvic excavation. Vaginal examination shows the floor of the pelvis as rigid as a deal board, the uterus fixed in the middle immovable, the functions of bladder and rectum attended by constant urging and a persistent pain, the floating contents, i.e. tubes and ovaries fused and fixed in just that position in which the exudation found them. As the inflammation subsides, the exudation shrivels and contracts, the bladder and rectum, constantly dilating and contracting, preserve more or less of their integrity, but the

uterus, tubes, and ovaries are doubled up into a confused mass, adhering to whatever the exudation has affixed them, and finally becoming the seat of so much pain and irregularity of function that nothing short of their complete removal brings any permanent relief.

Exactly such a case as here sketched I have seen once and again in consultation with Dr. Clarke; the history in this case is conclusive, and the left ovary, fixed by adhesion to the rectal wall, is the source of constant and considerable suffering, as the tender mass projects into the caliber of the bowel. Precisely such pelvic conditions I have recently seen in a patient through the courtesy of Dr. Cooper, and although the history is not so clear, the local conditions leave no room for a shadow of doubt as to the preceding processes. And in our *externæ gynæcological* department I have a patient sent to me by Dr. Moir, whose pelvic involvement, induced by infection after marriage, is marked; but whose symptoms have been markedly lessened by the appropriate therapeutic measures.

Whether manifested chiefly as lesions within the tube, whose marked features are tubal degeneration and cyst, or as lesions without the tube, whose principal characters are adhesion, contraction, and cicatricial distortion of the tubes, the results are the same—total impairment of function and permanent and crippling suffering.

I should like to have treated the symptoms in detail, but these are protean. I must rest content with stating that in the acute stage, if there be one, the conditions are those of acute pelvic-peritonitis, and as the state gradually becomes chronic the most strongly marked features are persistent pain with pre-menstrual aggravations, and profuse or scanty, often irregular, menstrual flow. A life of chronic invalidism is the result, and thousands of unfortunate women are now cooped up in back London drawing-rooms, bearing the imprisonment with exemplary patience and resigned to their fate, for whom nothing short of entire removal of the much

impaired organs will bring permanent relief. Symptoms can be, and often are, alleviated by the indicated drugs, but the one prime element standing out in all these cases is the *persistent recurrence* from time to time of the most troublesome symptoms. The snake may be scotched: he is difficult to kill. This clinical feature of recurrence, however well the patient may seem, is never wanting, and in an extended view of the history is always found to be existent again and again; the intervals grow shorter, the condition more permanent, until, finally, a status of constant, scarcely remediable discomfort and pain is established, from which neither poppy nor mandragora, nor all the drowsy syrups of the East, can release with a tithe of the certainty that abdominal section and removal of the affected mass can do.

Much that is palliative may, however, be accomplished by homœopathic therapeutics. These must be varied according to the stages of the case and the special symptomatic indications. In the recent acute stadium, belladonna will often prove most serviceable for the exudation; the vesical symptoms frequently yield to it, or to *terebinthina* or *cantharis*. Later, when the remanent lesion has to be treated, as the symptoms are protean the remedies vary also; but in my practice I have seen excellent results from polychrests like sulphur, lycopodium, thuja, nitric acid; and later, china and ferrum.

CYSTIC DISTENTION OF THE TUBES.

When the tubal lumen is occluded from adhesion of parts of the canal, or twists, or strangulating bands from exudation and contraction on the serous surface, retention of altered secretions occurs. The cause of retention is obvious; and the alteration of the secretion is obviously probable also. If the secreting elements in the tube have not been wholly destroyed, nor the inflammation sufficiently acute to generate pus, the opposite raw inflamed areas of the narrow lumen adhere, secretion collects between the areas of stric-

ture, and this may accumulate in some quantity till the obstructive power of the stricture gives way, or the distensible limit of the tubal cyst is reached. This forms the condition known as hydrosalpinx. This of all forms of tubal cyst is the least noxious; if it burst into the peritoneal cavity it causes no irritation, and some operators actually puncture and allow the cyst contents to dribble away into the pelvic excavation. Pressure symptoms with more or less pain are the conditions which call here for active treatment; and the exact nature of the contained fluid can usually only be diagnosed after a view of the cyst gained by abdominal section.

But inflammatory processes do not always end with the exudation of serum. When leucocytes undergo hasty proliferation, and necrosis of these "tissue elements without organization" occurs, then is formed the unpropitious fluid pus. And pus, collecting in the lumen of the tube, discharges itself in the direction of least resistance when the tension of accumulation overcomes the resistance of obstruction. The tube in its course has a caliber not exceeding that of a probe, and inflammatory swelling causes sufficient obstruction to give rise to fluid accumulations of low tension. But acute catarrhal processes, causing destruction of superficial cellular layers, eventuate in the adhesion of opposed bared areas, and so are formed one or more loculi, containing fluid, and separated by areas of stricture, completely barring the exit of tubal secretion. While this process occurs in mild degree as an hydrosalpinx, it always exists when the local disturbance has caused the formation of pus, and to these loculated collections of pus, the term "pyosalpinx" is given. Here, as in the former condition, the tube distends more and more, until the limit of expansion is reached or some traumatic influence determines rupture. Irruption into the peritoneum under these conditions is always fatal, unless the pus be speedily removed by flushing.

The relation of gonorrhœa to pyosalpinx has so recently been ably and exhaustively dealt with by Dr. Blake that I have no intention of discussing the topic at length, only stating that I thoroughly agree with him concerning the frequency with which venereal infection in woman eventuates in pyosalpinx, and the fact that pyosalpinx is most frequently caused by gonorrhœa.

But curiously, in myomata, very frequently tubal cysts of the nature of pyo or hydrosalpinx are found. Dr. Thomas Keith alludes to this fact, and my experience distinctly corroborates it. (Case seen for Dr. Cooper narrated.) With these myomata are often conjoined ovarian and tubal lesions, as *post or propter hoc.*, and in operating, removal of appendages for actual disease is quite as much required as removal for secondary influence on the uterine tumor.

Before leaving pyosalpinx, I must call attention to the well marked diathesis that often accompanies this lesion. Whether gonorrhœal or simple in initiation, a relapsing anæmia with varied local symptoms is a leading feature, and is the more pronounced in proportion as the cyst is specific in origin. (Illustrative cases cited.)

The remaining tubal distension with which the pelvic diagnostician has to treat is hæmatosalpinx, or the accumulation of blood, in various stages of retrograde metamorphosis in the tubal lumen. This, after acute catarrhal processes and the frequent erosion of the vessels coursing in the walls of the tube, is not difficult of explanation. But in the last few months an important monograph from Germany has directed attention to the frequency of hæmatosalpinx as a factor in atresia of any part of the genital canal, tube, uterus, or vagina. This monograph, which I lay before you, deserves the most careful consideration. It shows that often in the frequently fatal results of incision for menstrual retention, the real cause of death is not negative pressure in the abdomen and suction through the tube, as suggested by Matthews, Duncan and others ; but actual tubal rupture,

where the oviduct, together with the uterus, has become enormously distended, and rupture following the altered conditions of parts after incision causes death. It also shows by frequently cited cases the prime necessity of not allowing menstrual retention to continue; inasmuch as each patient exposes herself to a sudden and disastrous end, when earlier and wiser measures would have ended more happily.

The diagnosis and the treatment of tubal cystic swellings I must treat in brief. The diagnosis can only be established by the bimanual. Fluctuating swellings, conical in shape and twisted, inclined to one or other parametrium, and often in Douglas, together with marked evidence of other inflammatory pelvic affection at some time: these are the principal proofs of the existence of tubal cyst. But in the experience of the most accomplished diagnosticians, conditions of marked tubal distension with serum or pus may exist which escape altogether the usually accurate detection of the bimanual.

Pain may be present or absent, but usually in the history the inception of pre-menstrual pain, gradually increasing in duration, and often entirely ceasing during the period, is observed. (Case seen for Dr. Epps cited). Other local troubles, chiefly dragging pain, are usually observed, and almost without exception marked increase of the menstrual flow. Bladder and rectal troubles are often superadded, and radiated pains from the affected side further fill out the picture.

For treatment, the only satisfactorily worked out plan is abdominal section and complete removal of the crippled and dangerous structures. This is eminently safe and satisfactory, although relief consequent upon removal of the parts affected may be postponed for a few months before becoming complete. The medicinal treatment on the homœopathic plan has hitherto been limited to the palliation of concomitant troubles. Pain and hæmorrhage, anæmia and

associated conditions, these plainly call for the oft-tried and oft-successful simillimum. But in my experience the tendency to recurrence, to frequent relapse after apparent relief, indicates a more radical treatment than lies within the sphere of drugs, while in undoubted pyosalpinx there is no alternative procedure to complete removal, by section, of the dangerous cyst and aversion of the otherwise necessarily fatal termination.

TUBAL GESTATION.

Had the "progressive epoch" comprised no brilliant successes beyond those achieved in the sphere of tubal gestation, its advent would still have been phenomenal. Anterior to this time, the whole mass of information we possessed on the subjects of its pathology and treatment was nebulous and vague. Classical descriptions of the catastrophe and its post mortem appearances date from the thirteenth century onward, and yet, through the centuries, the hour and the man had not arrived. The influence of pre-potent professional authority, the inability to see or interpret facts, except through the mental medium of others, produced the usual unblushing and persistent professional copyist. Erroneous and incomplete observations were handed down with a faithfulness and tenacity suggestive rather of the library than of the bedside, of the plagiarist than of the original observer. Even down to times so recent as those of Matthews, Duncan and Emmet, the distinction between intra and extra peritoneal hæmatocele, and the frequency or rarity of peritoneal encystment after intra-peritoneal hæmorrhage were confused and confounded. Authorities, such as Barnes in England, Emmet in America, Schroeder in Germany, even these spoke with limited information, and an uncertain sound, on the nature and relations of tubal gestation and pelvic hæmatocele. But the work of the true scientific observer, which reduces complexity to simplicity, and unifies ideas similarly based, but divergently developed, has of late given a coherence and serial relation to a vast

but amorphous mass of facts, the product of previous work. To fully grasp the enormous advance thus made in the last decade, we will consider in detail the subject of tubal gestation.

A.—THE CAUSES OF TUBAL GESTATION.

When a ripe ovum, extruded from its follicle, enters the pavilion of the Fallopian tube, its arrest whilst in the duct is a contingency fraught with danger, in that fertilization and development may occur in situ, the fertilized ovum adhering to the lining membrane as in the uterus. A bald statement such as this requires elaboration, for were no mechanism at work to insure the extrusion of the ovum, before fertilization, from the duct, tubal pregnancies would be as common as uterine ones. The sole adequate mechanism is that of the cilia of the superficial cell layer in the tube; for these fulfill the double and equally necessary function of extrusion of the ovum and barring the progress of the fertilizing element. Therefore any process causing destruction of the ciliated lining of the tubes places these ducts in exactly the same position as the uterus for embryonic development. Clinically this is verified; for the previous history of tubal gestation usually indicates some prolonged uterine affection of a catarrhal nature, and sterility for some years, finally eventuating in ectopic gestation. Parry, whose work I lay before you, insists on this serial connection, and places great stress on the prolonged reproductive inertia preceding ectopic gestation. Either some time elapses after marriage before embryonic development, or a parturition is followed by a prolonged history of uterine trouble and sterility, finally terminating in some form of non-uterine gestation, usually tubal. Any cause of desquamative salpingitis, specific or simple, after delivery, or as a sequel of catarrhal lesion extending to the tubes, or as most frequently, associated with a sub-acute pelvic peritonitis of obscure origin, any causes such as these may place the subject of these ravages in a most critical condition as

concerning the great pelvic function. To sum up, tubal gestation can never occur in perfectly normal and healthy tubes; that any cause of tubal lesion involving the loss of the ciliated lining places the tubes on the level of the uterus for embryonic development; and that usually a prolonged history of pelvic trouble and sterility precedes the abnormal gestation.

B.—THE CLINICAL HISTORY OF TUBAL GESTATION.

As already stated, a prolonged uterine or pelvic lesion, with catarrh at the tubes, or desquamative salpingitis, is the necessary precedent for this form of ectopic gestation. If not a primipara, a history of some past puerperal trouble, dragging its weary length over years, with concomitant sterility, are usually the elements in the history. At length the scene changes, the period ceases for two or three months, and the process of gestation may continue unmarked by any symptom in any way, shape, or form indicative of the impending catastrophe. Suddenly, at any time from the first to the fourth month, the patient is seized with violent abdominal pain, becomes rapidly collapsed, and presents all the classical signs of internal hæmorrhage. The further progress of events depends entirely upon the direction of rupture, which, as we shall see later on, is again conditioned by the aspect of the tube on which the placenta is growing. If, and here I must anticipate a little, if the site of rupture of the tubal gestation sac is opposite that part of the tube not covered by peritoneum, i.e. the part in contact with the cellular tissue of the broad ligament, the contents of the cyst, and the free bleeding from the placental sinuses ruptured, issue into the broad ligament cavity. Now, as this is but a potential cavity, and its layers capable of but limited distension, the bleeding is soon checked, and the chief risk incident to rupture averted. Now that the embryo lies between the layers of the broad ligament, three possible issues confront it. It may, freed

from all connection with uterus or appendages, continue to develop as in normal gestation, expanding the broad ligament over it, and going on to term, at which date a viable child may be removed by abdominal section. On the other hand, the embryo thus violently perturbed by rupture may die, the amniotic fluid be absorbed, the foetus and placenta disappear, and the blood clot undergo the well-known series of changes eventuating in resolution. Or suppuration of these materials may occur, a true broad ligament abscess, and the pus seek vent in one of the following situations: oftenest through the rectum; frequently, through the posterior cul-de-sac of the vagina; less frequently, through the bladder; and very rarely, through the umbilicus.

Or after a variable period of development between the layers of the broad ligament, the pseudo-cyst thus formed may rupture, the contents be discharged into the peritoneal cavity, and the issue of events be death either from hæmorrhage or peritonitis.

To recapitulate, the conditions preceding rupture of the tubal gestation sac are: (1) Previous uterine and tubal catarrh, causing loss of the ciliated epithelium of the tube; (2) In the married state, a prolonged antecedent period of sterility; (3) A periodic discharge persisting, but irregular and profuse, only occasionally either normal in nature or entirely absent; (4) Usually an entire absence of pain or discomfort, the patients frequently believing that gestation has not begun; (5) From the fourth to the twentieth week a sudden and violent change, caused by rupture of the gestation sac, and which most frequently causes the death of the embryo; occasionally, however, with survival and continued growth of the latter.

The events at the time of rupture and ensuing therefrom are:

1. Primary rupture of the tubal gestation sac into the free peritoneal cavity, with almost certain death from

hæmorrhage; or into the broad ligament, with a rapid cessation of serious symptoms.

2. Rupture into the broad ligament may eventuate in—

- (a) *Death of the embryo*, with absorption of embryo, blood clot, amniotic fluid, and placental tissue.
- (b) *Death of the embryo*, with partial absorption of material, resulting in suppuration, pus opening into rectum, vagina, bladder, or umbilicus.
- (c) *Continued development of the embryo* in the pseudocyst formed in the broad ligament, a viable child being removed at term by abdominal section.
- (d) *Continued development of the embryo* for an indefinite time in the broad ligament, terminating in

3. Secondary rupture of this distended broad ligament cyst into the free peritoneal cavity, with the risks and result of primary rupture.

C.—THE RESULTS OF TUBAL GESTATION.

These have been incidentally reviewed in the preceding section. The necessary result of this form of ectopic development is rupture of the tubal sac at some period between the fourth and the twentieth week of pregnancy; and the most usual result of this rupture is death from intra-peritoneal hæmorrhage. To show the possible amount of bleeding, I cite the following case from Tait: "In November, 1887, Mrs. A. was seized with pain in the abdomen, followed by vomiting and faintness. An opiate relieved pain, but collapse followed, and death ensued the same evening. At the post mortem the abdomen was found full of clots, estimated at from 70 to 80 ounces. The left Fallopian tube had ruptured and was full of clot; an ovoid swelling of it proved to be a tubal pregnancy." Primary rupture of the gestation sac into the peritoneal cavity is almost uniformly fatal. The same authority remarks: "I have never seen a case of suspected rupture, or one in which we suspected an intra-peritoneal effusion of blood, recover if left alone."

Rupture into the broad ligament is not nearly so serious an occurrence. The majority of cases with this termination constitute the bulk of broad ligament hæmatoceles. The contents of the sac and the products of rupture are absorbed, and nothing beyond some cicatricial tissue remains to indicate the occurrence, or the traumatism may be too severe to pass off thus lightly, and suppuration may ensue, constituting a broad ligament abscess, finding vent into some hollow viscus, or appearing externally. These cases drag on a weary length, and frequently drainage by abdominal section offers the only certainty of a radical and a permanent cure. Or again, the effusion of blood at time of rupture may be insufficient to kill the embryo, which develops in the cellular contents of the broad ligament, and may go on to term, giving rise to much misgiving on the part of the accoucheur as to the exact condition of matters. Or again, the pseudocyst may become too distended for its further expansion, and may rupture into the peritoneal cavity, of course carrying with it all the fatal possibilities of primary rupture of the tube directly into the peritoneum.

THE CAUSES OF RUPTURE OF THE GESTATION SAC.

Primarily, the Fallopian tube does not seem to be capable of indefinite distension, and usually reaches its limit of expansion early in the history of gestation. The increasing tension of contents therefore insures its rupture at the point of least resistance. This is almost always determined by the site of the placenta. The villi of this rapidly growing body cause thinning and almost perforation of the sac wall, the vascularity of the parts increases, and some temporary increase of intra-abdominal pressure is the final element in the induction of rupture.

THE TREATMENT OF TUBAL GESTATION.

(a) *Before Rupture.*—It is not at all expectable that treatment of tubal gestation before rupture of the sac can be generally applied, on account of the entire absence or

frequent ambiguity of the symptoms and physical signs. The symptoms may exactly simulate those of ordinary pregnancy, and rupture be the first event indicating the actual state of things, or the physical signs may be those of tubal occlusion, for which tubal gestation has been mistaken by the most competent diagnosticians. When, however, it happens to be diagnosed anterior to rupture, three alternative methods of procedure present themselves: (1) Arrest of foetal life by electro-puncture; (2) Arrest of foetal life by morphia injections; (3) Abdominal section and removal of the sac and contents *en masse*. The first and second methods are entirely inadvisable, because the balance of evidence is in favor of the placenta continuing to grow after foetal death, and so very little is gained by these proceedings. Considering the mortal risks hourly run by the gravida in these circumstances, and the certainty of rupture at some date, and at the longest abdominal section for removal of a viable child at term, there is no room for difference of opinion on the subject of ablation of the gestation sac as the safest and wisest plan.

(b). *After Rupture.* If rupture into the peritoneum has occurred, section for tying the torn vessels and removal of masses of clot from the peritoneum is the procedure imperatively called for, without this a fatal result almost inevitably ensues. If rupture has occurred into the broad ligament, *quieta non movere* is the obstetrician's rule, as most of these ruptures with effusion spontaneously heal. Those that go on to suppuration may be dealt with afterwards.

Such are some of the facts and generalizations which the adoption of methods of precision in modern gynæcology enables me to lay before you to-night. The harvest truly is plenteous, but the laborers are few. Until we know much more of the secret of processes which eventuate in gross lesions, until we have fuller acquaintance with the laws of heredity, of environment, of disease, we cannot reach the high ideal of our art: To prevent as well as to cure—to

plan a *restitutio in integrum* rather than a regrettable, if necessary, mutilation. But the laws of therapeutics cannot be most usefully applied until this rich field of knowledge has been explored much more extensively; and it is to homœopaths in particular, who probably hold in their hands the key of the situation, to play that part in modern progress which their traditions and their methods so distinctly mark out for them.

PLACENTA PRÆVIA CENTRALIS.

BY

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CHICAGO, ILL.

It has been well said that the insertion of the placenta upon the internal os is one of the most unfortunate of nature's errors. Depaul gives a table of twenty-five cases of central insertion, with a death-rate of fifty-six per cent. The frequency of such cases is variously estimated from one to five hundred or twelve hundred. These cases are particularly unfortunate, for the danger is not over with the delivery, as they are very liable to have post-partum hæmorrhages and septicæmia, although every antiseptic precaution be taken, as was in this case. The case is as follows: Miss A. B., æt. eighteen, Irish, family history good, and has always been healthy, was brought to the hospital with the history that she was seven months pregnant. During the last four weeks has lost considerable blood; sometimes would have gushes, but every day there would be some hæmorrhage. On the day she was admitted she had some bearing-down pains, which would come about every half-hour. Patient was very pale and weak. Pulse slack and weak, at 120. Temperature 99°. When patient

was placed in bed there was another large hæmorrhage, which was soon controlled by introducing into vagina several large tampons of absorbent cotton. Examination showed no fœtal heart-sound. Vertex down and back to left. Os, size of a dollar, and placenta presenting. The margin could not be felt without using force. On account of the condition of the patient, an anæsthetic was contra-indicated. Introduced Barnes's dilator—using the air-bag and the air-pump of the aspirator. Some difficulty was found in keeping the dilator just at the desired point, but after continued dilatation for some time, the right hand was passed into the vagina, and with two fingers to the right, detached placenta, by sweeping two fingers between the placenta and the uterus, rupturing "waters," detached placenta entirely around and delivered it first. Brought down feet, which were to the right, and delivered slowly with slight traction. Notwithstanding the care taken at this point, there was a slight laceration of the cervix. Gave hypodermic of ergot and three of whisky, as the patient was quite weak, and altogether the prognosis was not very favorable. Elevated foot of bed, and applied hot bricks. Patient received a vaginal douche of 1-6000 bichloride Hg. and equal parts of boracic acid and iodoform were dusted upon external genitals.

Pulse was now 120, and temperature 99°, which gradually arose till the third day it was 104°. Discharge now commenced, which varied as times from a grayish to a yellow, and offensive. Douches were then ordered of bichloride of merc., 1-6000, and whisky four ounces to one quart of hot water, in alternation, every six hours. The temperature fluctuated from 102° to 104°, and on the fifth day gave an intra-uterine douche of 1-16000 bichloride of merc. Considerable amount of grayish clots were washed away by working the glass douche-tube to and fro. Temperature fell 2.5° in seven hours and patient felt much better. By the seventh day the temperature was up to 106°, and pulse

144. Gave intra-uterine douche, and injected into the uterine canal iodoform one part, and ether six parts, at 5 P.M. The next morning, at 3:30, had a severe chill, and at 4 o'clock, temperature 106° . By noon the temperature was 99.2° . That evening, at 6, had another severe chill, and at 7 the temperature was 104.8° . On the ninth day, temperature was 106° , at 4 P.M. Gave intra-uterine douche and used iodoform and ether again, at 10 P.M., and at 2.30 A.M. temperature was 98.8° . Temperature fluctuated from this to 103° till the thirteenth day, and then gave another intra-uterine douche. Temperature now stayed down, and averaged 99° and 98° till the twenty-first day, when the patient sat up in bed; and on the twenty-third day, temperature continued normal, and now the patient sat up in chair and made a rapid recovery. After each time that an ordinary glass syringe full of iodoform and ether was injected into the uterine canal, the patient received a vaginal douche to carry off any *débris*.

DYSMENORRHŒA.

BY

D. N. RAY, M.D.,

CALCUTTA, INDIA.

Miss D., a school-girl, aged fifteen, had an attack of acute rheumatism some time ago, during which she was treated by allopathic physicians. On the 20th of August, 1888, she was brought to my office for a pain in her right shoulder joint and partial stiffness of the same. The pain was continuous ever since her last attack of rheumatism. Cod-liver oil was prescribed for her by her own physician and she took it for last four months or so, but this did her no perceptible good. Her mother was very anxious about

her hand, and told me that her own physician had tried several ointments and liniments but nothing did her any good. She was thin, delicate looking, shy; her appetite was poor, tendency to looseness of bowels, sleep was fair; the right hand was thinner and weaker than the left. She could raise the hand as far as horizontal position; there was pain in the right shoulder joint on pressure, but no swelling. There was no mischief in the heart. Her menses were irregular and painful; sometimes they were absent for three or four months, but when they appeared the discharge was scanty and painful; it was pale, and lasted only for two days. The menses first appeared at thirteen years of age, and then were absent for six months; and then they came again and were regular for some months, but they were always painful. She took allopathic medicine for dysmenorrhœa but did not derive much benefit, so she gave up all treatment. All this was told to me when she first came under my treatment. On inquiry I found the menses were absent for over a month, and she was not sure when they would appear again. At present I began to treat her for her shoulder. I gave her *pulsatilla* 3, one drop, to be taken four times daily, and she was told to inform me at once if the menses would appear. She took the medicine for a week and came with a report that the pain in the shoulder joint was better, but still she could not raise her hand higher than before. Her appetite was better, no looseness of the bowels, and she was looking more lively. I asked her to continue the same medicine thrice daily for another week. She came after a week and her hand was no better than last I saw her, although she improved a little in her general health. I gave her *phytolacca* 3, one drop thrice daily, and also *phytolacca* liniment to be applied externally. In a week she came to my office with a report that she could raise her hand much higher than before and the pain was almost gone, and that she could make use of her hand a little,—she could raise a glass of water to her mouth and

drink. The same treatment was continued and she got entirely well in a short time. Now, as to her dysmenorrhœa; on the morning of the 29th of September the menses made their appearance after a period of over two months. They came with their usual pain and the discharge was almost *nil*. I went to see her at her place and found that she was very restless for the pain, which she pointed out to me, was very severe on both sides of the lower part of the abdomen, and less so all over. The pain used to increase in paroxysms, though she was seldom without it. During the paroxysm she would toss about in bed, with tears in her eyes. I repeatedly questioned her to explain to me the character of the pain, but she could not do so. She only said, "It comes on suddenly and makes me almost crazy and out of breath and I don't feel easy in any position." The discharge was only a few drops. Thinking this to be a case of ovarian neuralgia, I at once made up my mind to give *xanthoxylum*. I took ten drops of it in two ounces of water and gave a spoonful of it, and asked the mother of the patient to repeat a dose every half an hour if the pain continued, and at a longer interval if it subsided. The pain completely disappeared after the fourth dose, but as she was afraid the pain might return again, she took two more doses at an hour's interval, when a profuse discharge made its appearance; it was so much that it alarmed the whole family. Some messenger came and informed me in the evening that the pain was gone but the discharge was very profuse. He wanted some medicine to stop the discharge immediately as the whole family got frightened. For their satisfaction I gave half a phialful of *aqua pura*, to be given one spoonful every two hours. Next morning the report was that the discharge was less and she was feeling better. This time her monthly periods lasted for five days. Although there was much loss of blood, she was feeling much better, and her general health began to improve. All medicine was discontinued in the mean time. A week previous to her next monthly courses,

I gave her one dose of *xanthoxylum* 1, one drop, daily. This time her courses were two days earlier than the proper time, and she had no pain. The courses lasted for five days with free discharge. She took medicine again in the same way previous to her monthly times for the second and last time. Her courses became regular and painless ever since.

● EDITOR'S TABLE. ●

—There are some facts which speak against a purely *neoplastic* theory as to the nature of uterine fibromata proper. These tumors have many distinguishing points when compared with the sarcomata, which have an independent life, and are purely neoplasms in every sense of the word. Fibromata follow indifferently hypertrophy of the uterus during pregnancy and its involution after the menopause; they develop most frequently in females exposed to long-continued uterine congestion. Finally we have a late contribution by Rosenhart (*Gazette de Gyn.*) in which he analyzes eleven cases of myoma of the uterus.

Of these, five cases were complicated by organic affections of the heart, one by angina pectoris, and one by pulmonary emphysema. According to his views the habitual congestion in which the pelvic organs are found in diseases of the heart, and in emphysema, constitutes a condition favorable to the production of myomata. This class of uterine growths would then be of non-inflammatory hyperplastic origin, and not of neoplastic, in the true sense of the word.

* * *

—Since creolin has been so highly lauded as an antiseptic dressing it is well to call attention to its dangers as pointed out by the experience of several who have used it extensively. M. Borehmeyer relates toxic symptoms observed in a child two and one-half years of age, whose crushed finger was dressed with applications of one and a half per cent. solution of creolin (*Gaz.*

Med. de Paris). On the fourth day the finger was covered with vesicles, both large and small, which ruptured spontaneously and discharged a yellowish liquid. The eruption soon disappeared from the injured hand on the removal of the application, and cure followed, although the eruption again returned on renewing the applications of creolin. Besides this there are the records given by Dr. Wackez (*Ther. Gaz.*) in which we find that in seven out of seventeen surgical cases, creolin produced eczema, erythema, and vesicular eruptions, and desquamation of the skin in large patches; at the same time the patients had more or less severe constitutional disturbance, and an examination of the urine showed that these poisonous effects were attributable to the presence of phenol.

* *

—To bring into prominence the important points of a medical article or, in other words, to point an article, is somewhat like pointing a pencil. Not many can do it without hacking the way up to it; and when it seems in a fair way to be realized the end snaps and we have nothing left of the author's meaning but a ragged stub. Digression is one of the faults leading to such a result; we find a hack here and another there until only an irregular shape with blunted point remains. Compare such work with that of the man who "hews to the line" and little remains in favor of the former. And yet digression, though such a noxious weed, is in the eyes of medical writers who must "pad," "as fair and dear as that which the child hath planted in his garden for a flower, and which, though the sage ones declare to him to be hurtful and ill grown, he cannot bring his heart to uproot." Worse than digression, though, is a failure on the part of a writer to see in its correct relations the point involved in his own argument. Many a splendid article in medicine has failed to make the proper impression not only because the writer failed to make his point clear, but also because he had not the proper grasp with which to handle his paper.

* *

—The large number of cases of floating kidneys lately reported has aroused some speculation as to whether the increase in reports

is due to our present manner of living or whether due to better diagnostic skill.

Dr. Von Korányi of Buda-Pesth, tries to throw some light on the subject by associating high heels with movable kidneys. He has made a series of observations on the influence of dress in cases of floating and movable kidney, and has also studied a large series of statistics prepared from the experience of others. He endeavors to show from these researches that high-heeled boots play a distinct part in causing displacement of the kidney, especially in conjunction with the heavy drag of clothes fastened above to the constricted waist. The elevation of the heels causes an increase of the lumbar curve. The obliquity forwards of the lower part of the loins is increased ; the psoas muscle bulges forward ; the quadratus lumborum also bulges forward and is displaced outward. Dr. Von Korányi shows that this entails displacement of the kidney, even if that organ lie originally well back in the loins. The pushing forward of the kidney stretches the peritoneum immediately in front of it. This weakens the stretched serous surface, and, especially during exertion, the pushing forward of the peritoneum may easily end in complete dislocation of the kidney.

* * *

—In looking back over the JOURNAL contents of 1890, we find ourselves fortunate enough during the past year to have presented our readers with *four hundred and ten* therapeutics references to drug indications in gynæcology, obstetrics, and pædiatrics. During the present year we hope to do even better, and intend at the close of 1891 to add to our regular yearly table of contents a therapeutical index.

* * *

—With regard to our note on the American Obstetrical Society in the November issue, we are in receipt of a very pleasing letter from the secretary of that organization, expressing himself as in readiness to join in any effort to revive the society.

The Obstetrical Journal is very anxious to have this subject of reviving the Society thoroughly discussed, and is willing to give every encouragement to propositions looking to the continuance of the organization.

—The fifth session of the French Congress of Surgery will be held at Paris in April, 1891. The following questions will be the special order of the day :

1. Surgical intervention in the affections of the central nervous centers (primary trepanation of the cranium excepted) ;
2. Secondary results of ablation of the annexes of the uterus in non-neoplastic affections of these organs ;
3. The different kinds of suppuration examined in bacteriological and clinical points of view.

* * *

—We are in receipt of the preliminary circular of the International Congress of Homœopathy forwarded by the executive committee in charge of arrangements. As we understand the text of the circular, the subjects in our line, for consideration by the Congress, will be confined to homœopathic therapeutics of diseases of women and of children. Inasmuch as the members of the committee are open to suggestions, we would recommend to their consideration the fact that homœopathic specialists in gynecology, obstetrics, and pædology find as much of interest in the perfecting of methods of diagnosis and of operating, and in the discussion of the limitation of operative procedures as they do in homœopathic therapeutics alone. To confine our specialists to the one subject, homœopathic therapeutics, will be an injustice which will surely be resented. Be warned in time, gentlemen of the committee of arrangements, and broaden the field of discussion.

● GOLDEN GRAINS. ●

—Tarantula has to its credit the cure of two cases of chorea in children in which the symptoms continued during sleep.

—Petroleum is indicated in the throat affections of scrofulous children where there is dry, teasing cough, coming on at night, on going to bed.

—In prescribing infant foods it is worth remembering that rice is an astringent and farina is a laxative.

—In children the physical signs of pulmonary disease must be interpreted with the greatest reserve. Several well-observed cases are recorded in which the localization of physical signs at the apices of the lungs in children was no evidence of tuberculosis ; and, on the other hand, cases have also been noted in which the most careful auscultation failed to detect any signs of cavities, proved to exist by post-mortem examination.

—Bromine is indicated in the hypertrophied tonsils of light complexioned children, where these glands are deep red and covered with a net-work of dilated blood-vessels. These fair-haired, scrofulous children will also be found suffering from other dyscratic manifestations ; the hypertrophied tonsils will be accompanied by swelling of the cervical glands, and there will also be added a nasal catarrh, which shows itself in a smarting soreness inside the nose, in discharge of crusts and scabs, and in tendency to ulceration of the nasal mucous membrane.

—The *British Medical Journal* reports the effect of antipyrin on the puerperal breast as follows :

CASE.	DOSE.	
No. 1.	20 grains for 3 nights.	Cessation of milk flow.
No. 2.	15 " " 4 "	" " " "
No. 3.	10 " " 3 "	" " " "
No. 4.	15 " " 3 "	" " " "
No. 5.	10 " " 5 "	" " " "
No. 6.	20 " " 3 "	No effect.

No. 6 was a very hysterical patient, and a primipara ; the other five cases were multiparæ. In No. 6 nothing in the form of medicine had any effect on the flow.

—The excitation of the brain produced by *cantharis* will sometimes lead us to think of it in the beginning of puerperal mania. The patient is violent at times, with paroxysms of rage tearing

clothing, striking, and biting at any one who approaches. The slightest touch aggravates, as does also the sight of a dazzling object, as a glass of water; with this the eyes are bright, and the pupils widely dilated, all symptoms approaching very closely to a belladonna condition. But there is a striking distinction between these two remedies that is pointed out by the appearance of the face, the belladonna patient having the characteristic red face and throbbing carotids, the cantharis patient usually exhibiting a pale, yellow, wrinkled face. With all this, when cantharis is the remedy, there is a history of characteristic urinary symptoms preceding and during the attack.

—A case of persistence of the canal of Nuck was related to the *Académie de Médecine* of Paris, at its last session, by M. Riche-lot. A young girl of nineteen years presented herself with a tumor in the right groin, projecting at the summit of the labia, and reducible. The surgeon believed it to be a hernia and yielding to the desire of the patient attempted a radical cure. The sac was dissected up to the depth of the inguinal canal, then opened; then there were found numerous diverticula and incomplete septa, with an excessively narrow communication to the peritoneal cavity, of such arrangement that it was impossible that the orifice could give passage either to a knuckle of intestine or to the omentum. A ligature was placed as high as possible, and the entire sac removed. The patient was discharged cured the tenth day. Given, then, only the simple narrow communication with the peritoneal cavity, the only possible diagnosis was a congenital hydrocele, explained by the persistence of the canal of Nuck, especially as the cavity corresponded in form with that structure. This is one of the proofs which make it impossible to adopt the opinion that the so-called hydroceles in women are hernial hydroceles or are simple cysts of the labia majora.

—From the peculiar action of sulphuric acid on the mucous membrane of the mouth, it is recommended highly in the aphthous sore mouth of children with summer complaint, marasmus, or in debility after these troubles. The mouth is filled with yellowish aphthous spots. There is profuse flow of saliva, the gums are yellowish white, and vomiting of sour milk occurs. The stools are

yellowish and slimy, present a chopped appearance, and are offensive.

—In order to relive all such troubles as endometritis, peri- and parametritis, cellulitis, ovaritis, etc., it is of first importance to secure a healthy and vigorous circulation in the skin.

—Among those remedies in which the circulation of the skin is badly perverted in uterine diseases we look first to graphites. We remember speaking on this subject before, and only desire here to sum up the indications for graphites as follows : Rough, harsh, dry skin ; scanty, delayed menses ; chilliness ; constipation, with dry stools covered with slimy mucous ; and a watery, profuse leucorrhoea.

—Before undertaking the radical operation for carcinoma uteri, carefully examine your patient under anæsthesia to determine the presence or absence of carcinomatous infiltration of the broad ligament or of the retro-uterine ligament. If there be infiltration of these structures an operation should be positively declined.

—Petroleum is another remedy, in which we find symptoms of disturbances in the circulation of the skin with menstrual disorders or uterine and ovarian troubles. A vesicular eruption appears which develops into an eczema, with thick scabs and oozing pus ; the skin grows harsh and dry. With this we find menstrual disorders, but, unlike graphites, where the menses are characteristically late and scanty, we find the flow coming on too early. The graphites patient is sad, apprehensive, and inclined to weep about trifles, while our petroleum subject is excited and irritable and inclined to scold about little things.

—Hubert (*Arch. d'obstet. et de gyn.*) has experimented with the classical obstetrical forceps on an artificial head filled with water. The amount of water lost shows how great a compression is possible, and how much the nerve centers may suffer thereby. It is also shown that the compressing action of the forceps tends to lengthen the long diameter but little and expends itself mainly in elongating the transverse. The diameters then which take the pressure of the blades are those which do not need to be reduced. To obviate the dangers of the common forceps Hubert has devised

an S shaped instrument, blades about parallel, approaching each other under the head very closely, giving great freedom for the elongation of the long diameter of the cranial ovoid. The cross bar is broken by a hinge, making it impossible to vary the inclination of the blades.

—To continue the comparison of graphites with petroleum, we have both remedies quite characteristically indicated in itching of the female external genitals. Under graphites this symptom reads, "*itching of the pudendum and vagina*"; under petroleum we have, "*intense itching of the genitals*," quite a similar symptom. But, as we pointed out above, under the first remedy, menstruation is too late, under the second, too early. Graphites has thin, white leucorrhœa; petroleum has an albuminous viscid discharge. Then, too, it is quite characteristic of graphites that the itching of the pudendum *precedes the menses*, while in the petroleum patient it is the menstrual discharge that causes the intense itching.

—M. Darthier (*L' Union Med.*) has been experimenting with the tincture of iodine internally in the treatment of the vomiting of pregnancy. He claims that it is not only useful in the vomiting of pregnancy, but in the vomiting of chlorosis as well. The dose is ten drops dissolved in four ounces of water, taken in three portions immediately after meals. It is said that the majority of patients take the iodine with pleasure; it often produces an agreeable sense of warmth in the stomach, lasting from five to twenty minutes.

☞ —In cases of hydropsia of the amnion there is a two-fold tendency to prolapsus of the cord; the excess of fluid prevents the fœtus from engaging early in labor and leaves the field free for the cord to pass down first; more than this, at the moment of rupture of the membranes, even when there is vertex presentation, the cord is quickly drawn downwards by the rush of liquid. Thus in cases of hydropsia of the amnion, it is necessary to watch with great care the rupture of the membranes and to examine the woman at once; when opportunity is afforded to rupture the membranes the flow of liquid should be guarded, and the hand should remain some instants in order to assure oneself that the

engagement of the fœtus has not been accompanied by prolapse of the cord.

—Perret et Devic (*Prov. Méd.*) report the treatment of four cases of incontinence of urine in children, with antipyrin. They gave 1.50 grs. to 2 grs. in two doses during twenty-four hours. In these four cases the incontinence disappeared on the fifth to seventh day.

—Among the local symptoms of tumors of the kidney among children, there is often associated with the asymmetrical development of the flanks a fine interlacing of dilated veinules in the skin of the abdomen. At an advanced period of the growth this dilatation becomes pronounced and the enlarged veins become tortuous. This dilatation is due to the compression of the inferior vena cava with which the right kidney is in intimate relation, for tumors of the right kidney are especially frequent; however, in some cases of tumor of the left kidney this venous dilatation has been noted when the growth has reached a considerable size.

—Euphrasia is sometimes successfully used in the phlyctenular keratitis or conjunctivitis of scrofulous children, where the initiation of the trouble can be traced to traumatism, such as sand having been thrown in the eyes. The conjunctiva is red and injected; the lids become puffy, dark red, and there ensues a thick, excoriating discharge. Even the tears which run over the cheeks are acrid and excoriate the cheeks. Arsenicum, however, runs close to euphrasia in these conditions. Both have acrid discharge and both are called for in scrofulous children. But arsenicum is more frequently indicated in the long-standing eye affections of scrofulosis and particularly in the form of arsenicum iod., in recurrent eye troubles with such an underlying basis. Under arsenicum, the tears are not only acrid, but they are also hot and burning. Besides, there is the distinguishing feature of arsenicum, the relief from warm applications.

—There are strongly marked lines of difference between the lesions encountered in the adult brain and those met with in the infant. In the former, when middle life is well past, we find evidences of retrograde processes which tend to weaken or damage

the walls of the arteries, and moreover, we have cardiac and kidney lesions which tend to increase the tension of blood in the vessels and lead to cerebral hæmorrhage. The infant brain has the advantages which an immunity from degenerative changes consequently brings, and the disadvantages of immaturity, for the vessels of the pia mater are exceedingly delicate, and readily allow of oozing through their walls, while the brain substance is wanting in firmness and easily damaged. Moreover, damage to a brain as yet partially developed is likely to effect greater mischief in the long run, than the same damage to an already well-developed brain. These differences are certain to influence the lesions which occur. In the infant we have meningeal hæmorrhage, meningeal inflammation both of brain and cord, and inflammation of the most vascular spots in the spinal cord; while we miss the large cerebral hæmorrhages and the various forms of softening so commonly occurring in the brain of the adult toward the decline of life.

● GYNECIC ETCHINGS. ●

—Dr. Burkhard, of Berlin, says of sepiæ in pruritus vulvæ, that it is especially well indicated, but that it never has produced a cure in his experience,—only relief. Further, he credits tarentula with two cures in this trouble, but says no remedy has given such uniformly good results as collinsonia in the low dilutions.

—Dr. Misrachi highly recommends the use of injections of caffeine in post-partum hæmorrhages where rapid assistance is necessary, and especially where the physician reaches the case after there has been considerable hæmorrhage. According to the author caffeine acts more rapidly than ergot, and produce a more effective result than ether, although the latter is a more rapid stimulant. He administers it in the form of solution, of which a hypodermic syringe-ful would contain four grains of caffeine, and gave three or four injections at once—in other words, injects hypodermically about sixteen grains of caffeine. He employs

caffeine, rendered soluble by the benzoate of sodium, equal parts of each dissolved in warm water.

—M. Dubrueil, of Montpellier (*Brit. Med. Jour.*), read notes of a case of hydatid cyst of the mammary gland before the Société de Chirurgie, Paris. A woman, aged forty-four, suffered for two years from an indolent tumor of the breast. Two months before observation the swelling began to grow very rapidly, and became painful. The superjacent skin was healthy. An exploratory incision was made, and a purulent fluid mixed with hydatid membrane escaped. The cavity was emptied completely and washed out with boracic acid and with a solution of nitrate of silver. M. Dubrueil considers that this method of treatment is the best, as the scar which remains is small. When the entire sac is dissected out, or rather when that feat is attempted, the cicatrix which forms after cure is extensive.

—In abscess of the mammary gland, when the abscess has opened and threatens to remain as a suppurating tract, phosphorus is a remedy not often thought of. It covers symptoms suggestive both of belladonna and of silicea. The inflamed gland has an erysipelatous appearance and red streaks start from the opening in the abscess (Bell.). The pus discharged has not a healthy character, but is thin, watery, and ichorous. There will frequently be burning, stinging pains, well-marked hectic fever, with night-sweat, diarrhœa, and anxiety toward evening. The edges of the fistulous opening are raised by exuberant granulations.

—Dr. G. Phocas (*Gazette des Hôpitaux*) describes a form of diffuse inflammation of the breast which has been observed by himself and by several distinguished Parisian surgeons. It occurs about the menopause. Its cause may be chronic irritation from clothing, overwork, etc., A tumor forms, independent of lactation, and occupies the greater part of the glandular tissue of the breast. It is bulky, often hemispherical, firm and uniform in consistence. Its surface is irregular. From its periphery proceed prolongations of the gland involved in the disease, just as in cancer. In two cases, at least, the tumor spread into the nipple. The skin is often free, but sometimes is adherent. The tumor has never been found to adhere to the pectoralis major. The

patient complains of pricking sensations and slight pain in the breast. The tumor is usually tender to pressure, most important is it to bear in mind that the axillary glands may be enlarged. A characteristic feature of this form of inflammation of the breast is its irregular course. Instead of increasing steadily, whether slowly or rapidly, it sometimes reaches a great size in a few days, and then slowly diminishes in volume, or else it grows smaller suddenly, and increases again after a short time, taking a long while to resume its former bulk. The resemblance to cancer is very great, and the tumor mostly looks like an advanced schirrus.

—Among the symptoms credited to *argentum nitricum* the sensation as if some part of the body were enlarged is very prominent. Our attention has been particularly called to this sensation when affecting the ovarian region, "feeling as if there were an immense swelling in the side affected, with pains in the ovary radiating to sacrum and thighs," and yet examination shows no enlargement. Among other prominent symptoms calling for *argentum nitricum* in female troubles are the following: Tremulous weakness, particularly of the lower extremities, and great general debility. Occasionally this debility takes on a chlorotic character and the woman appears drowsy and her face has a bluish, sickly hue. There is an anxious irritable mood, the patient being always in a hurry. If dyspeptic symptoms appear they are of the neurotic form, as described by Farrington: "The gastralgia is excited by any emotion, by loss of sleep, and frequently at the catamenial period. There is a feeling in the stomach as though a lump were there. This is sometimes accompanied by gnawing ulcerative pain, referred to the pit of the stomach. From this spot pains radiate in every direction. These pains seem to increase and decrease gradually, just as under *stannum*. With this, there is apt to be intense spasm of the muscles of the chest. The patient cannot bear to have a handkerchief approach the mouth as it would cause dyspnœa. The patient cannot bear the least food because it makes this pain worse. Sometimes the pain is relieved by bending double and pressing the hand firmly into the stomach. The paroxysms end with a vomiting of glairy mucus which can be drawn

into strings, or, what is more common, they are accompanied with enormous accumulation of wind. The patient for a long time cannot belch, but when she does succeed in so doing the flatus comes in an enormous volume."

—Fedorenko (*Wratch*, 1890, No. 20-22) contributes to the literature of hypertrophy and hyperplasia of the Fallopian tubes, in ovarian cystomata his own observations on eleven cases. He arrives at the following : That the maximum length of the tubes, given by Scanzoni as twenty-five to thirty centimètres, is generally exceeded, even up to fifty-eight centimètres ; that the hyperplasia especially belongs to the muscular layer ; that the tubes are sometimes the seat of inflammatory processes, probably caused by the mechanical distention dependent on the tumor ; that the hyperplastic processes are slow ; karyokinesis is rare ; occasionally regressive modifications are found, certain portions of the epithelial and muscular cells having undergone fatty degeneration ; and finally, that in some cases the tube was not found at the periphery but even in the wall of the tumor,

—The *Homœopathic Recorder* publishes a proving of paraffine by Dr. Wahle, of Germany, a translation from *L'Omiopatia* in Italia. As paraffine is reported to have been used by the homœopaths of Rome with success in uterine troubles we select the portions of interest to us :

Abdomen.—Sense of lassitude in the abdomen, which grows less when the parts are supported. Swelling of the abdomen and nausea as if about to vomit. In the morning, at nine o'clock, colicky pains in the abdomen which ceased after some minutes and a quantity of white mucus issued from the vagina ; these attacks are often repeated. Under the umbilicus, a cutting pain as if caused by a knife, extending downward to the genitals. When sitting, spasmodic pains in the lower portion of the abdomen, extending into the rectum and coccyx. After long sitting the pains are relieved, but walking makes them worse so that the body must be held in a slightly curved position. Wrenching pains in the calves, extending into the toes and preventing sleep the whole night ; she does not know where to put her legs. Spasmodic stabbing pains, one after the other, in the mons veneris.

when standing on her feet she has a desire to put one foot over the other.

—From Dr. A. Martin, of Berlin, we learn that the following subjects will be presented for discussion at the next session of the International Medical Congress at Berlin, from the 4th to the 9th of August, 1890 : 1. *Obstetrical Antisepsis*. 2. *Artificial Premature Labor*, its indications and methods. 3. *Vaginal Hysterectomy*. 4. *Electrolysis of Myomata*.

—In the use of Aristol as an antiseptic Dr. Gaudin advises the following preparations :

1. Aristol.....	5 grammes.
Oil of vaseline.....	q.s.
Dissolve and add :	
Gum arabic {	q.s.
Glycerine {	
To make medicated crayons 5 centimetres long and of doughy consistence.	
2. Aristol.....	0 gr. 50 to 1 gramme.
Cacao butter	q.s.
For six suppositories.	
3. Aristol.....	5 grammes.
Lard	5 "
Lanoline	40 "
As an ointment.	
4. 10 per cent. solution, in oils.	
5. Mutton suet	35.9
Olive oil	7.4
Caustic soda	22.2
Caustic potash	11.1
	<hr/> 100.0

To be used as basis for the preparation of a surgical soap, for cleansing the area intended to be operated on.

—At the meeting of the British Gynæcological Society, Oct. 23, 1889, Lawson Tait mentioned two cases of pyosalpinx which he attributed to the use of a drainage tube which impinged on the ligature and prevented it from healing over. In this connection he also reported that he had over and over again seen large collections of pus in the abdomen, in the tubes and broad ligaments, without the pyrexia attending that is supposed to be diagnostic of abscess formations.

—The most prominent symptom of paraffine under “stool” is obstinate constipation, particularly in children. There is **chronic** constipation, evacuations hard as nuts, fæces in small pieces, **and** continual urging to stool without result.

—Paraffine, according to Dr. Wahle’s proving, affects the **female** urinary organs very decidedly. We find recorded : Passes **much** urine. Frequent desire to pass urine after cramps in the stomach. Obligated to urinate three times in the space of four hours, but **only** in small quantities ; otherwise she only urinated once during the same time and with strangury. Slight itching and burning in the vulva when not urinating. Very hot urine, causing heat at the vulva. Very hot urine, with burning pain at the vulva.

—Coming to the female sexual disturbances produced in the provers of paraffine, we find : “ The menstruation appears several days too late. The blood is black and abundant. The menstrual blood is reddish black. The menstruation comes on six days too soon, when on the feet the blood flows continuously. During menstruation she feels cold externally and hot internally and must drink a great deal. Cutting pains through the body on the second day of the menstruation. White fluid discharge like milk coming away in drops. Very profuse white discharge, leaving white and gray spots on the linen, with itching in the abdomen. The white discharge has a sweetish odor. Twisting pains in the left breast. The nipples pain on touching them, as if they were sore inside.”

—In the midst of the confusion produced by the varying opinions and experience as to the utility of electricity in uterine neoplasms, Gustav Klein (*Zeitsch f. Geburts. und Gyn.*) has been endeavoring to establish something definite by experiments with myomata recently removed from the living subject. A current of 100 milliampères acting from five to sixty minutes upon myomata directly after removal gave the following : 1. A chemical action by the agency of acids at the positive and alkalies at the negative pole. 2. An electrolytic action (chemical decomposition). 3. A thermic action, rise of temperature at both poles. 4. Injury to arteries, veins, and lymphatics, which may be so considerable as to render these vessels inactive. 5. A physiological action upon the muscular fibers of the myoma and its vessels, expressed by

contraction, and finally relaxation. Microscopically, Klein's experiments show that the constant current has an important action. At the anode the borders of the cells were indistinct ; the protoplasm homogeneous but not swollen ; the granules diminished in size and slightly or not at all stained ; the lymphatic spaces were often dilated to wide, meshed cavities without formed contents ; the connective tissue was more altered than the muscular fibers. At the cathode the intense swelling of the protoplasm was conspicuous ; despite the enlargement of the nuclei the former occupied more space than the latter. The nucleoli were sharply stained. The enlargement of the lymph spaces was even greater than at the anode ; here also the connective tissue was more altered than the muscular fibers ; *interpolar action upon the tissues was not demonstrable.*

—Wounds of the bladder during a laparotomy are comparatively rare incidents. They are most likely to occur during the extirpation of tumors developed in the vesico-uterine cul-de-sac and especially when the neoplasm has pushed the bladder and peritoneum before it and so produced an elongation and flattening of the viscus over the anterior face of the growth. Sängcr reports an observation of a case in which the bladder was injured during the extirpation of a fibro-sarcoma of the ovary. A part of the viscus was mistaken for an adhesion and cut after ligating. The error was perceived immediately and the vesical stump sutured to the inferior angle of the wound ; the patient was catheterized during two days, and lavages of the bladder were made during one week. Reunion took place by first intention without the escape of even one drop of urine into the peritoneal cavity.

—CHILLS OF THE PARTURIENT.—Chills before delivery indicate dilatation of the os.

Chill immediately after labor indicates nervous derangement.

Chill in from thirty to forty-eight hours after delivery is most dangerous, indicating septicæmia as probable.

Chill on the third day is generally caused by commencement of milk flow or other breast complications.

When other chills are reported, inquire the location of pain, which will lead to the probable diagnosis.

In general be careful in diagnosis and treatment, for the completeness of the recovery will be in proportion to the part the remedy has in the cure.

Never use mechanical means in the treatment unless the cause is mechanical ; then as soon as the cause is removed rely upon the law of similia, under which any remedy may be useful.

Never use palliatives ; the homœopathic remedy will relieve pain as promptly as a reasonable patient or physician will demand, and the ordinary palliatives not only depress the system, but mask the most valuable guides to our remedies in subjection to symptoms.—*J. B. Gregg-Custis.*

—A COLOCYNTH SYMPTOM.—In the *Homœopathic Physician* for August, 1886, Dr. E. W. Berridge directs attention to what he calls "an important omission from Allen's Encyclopædia of a symptom experienced by a prover—Dr. Caroline LeBeau : *At 4 p. m. the colic came on, six days in succession.*" Having had a case which in a remarkable manner verified this four-o'clock aggravation, I communicated it to the columns of the *Physician*, as follows :

Mrs. R., while calling upon a neighbor, found an infant in terrible agony with the colic. She learned that it had been thus afflicted for three months ; that the doctor had done his best ; they had tried all the suggestions of the old ladies, everything had signally failed, and they were firmly convinced that the child would die. Wife came to me and related the symptoms as well as she could. I sent colocynth, which was given at six, again at seven, when the babe fell asleep, slept all night and nearly all the next day which somewhat astonished them, but they were confident that the evil would return as soon as the "effect of the opiate wore off." Subsequently it had an occasional dose and soon became well. Afterward I learned that the attacks occurred regularly at 4 P.M., lasting until 8. Now surely this was the most peculiar feature of the case, and a symptom supposed to belong almost exclusively to lycopodium.

I have since observed two similar cases ; in one the paroxysms recurred a little later, and in the other a little earlier, if I remem-

ber correctly, and both cured by colocynth. We may then with confidence place colocynth with lycopodium and helleborus as having a characteristic four o'clock aggravation.—*A. F. Randall, M.D., Advance.*

—**HOMŒOPATHY IN RUSSIA.**—Homœopathy is said to be spreading in Russia, especially in the upper social strata. Societies for the propagation of the Hahnemannian doctrines have recently been established at Tschernigow, Odessa, and Warsaw. As has been noticed in other countries, the clergy are conspicuous among the supporters of the great medical truth, and in Russia the military mind seems also to have an elective affinity therefor. Thus at Tschernigow one of the founders of the new society is the Bishop (Benjamin). At Odessa, among those who have signed the draft statutes of the society are the Archbishop of Cherson (Nikanor), Generals Count Rostowzew, Roop, Teplow, and Strandmann, and the mayor of the city, M. Marasli, with his deputy M. Ligin.

SOCIETY MEETING.

The annual meeting of the Massachusetts Surgical and Gynæcological Society was held at the Crawford House, Boston, December 10, and was largely attended. Among the guests present were Drs. Barnard and Stone, President and Secretary of the Rhode Island Society; Dr. Hooker of Hartford, Conn., and Dr. Bellows of Boston.

Five applicants, viz., S. H. Blodgett, M.D., of Cambridge; C. W. Garey, M.D., of Quincy; E. A. Fisher, M.D., of Worcester; Anna M. Chipman, M.D., and Sara A. Jenness, M.D., of Boston, were elected to membership.

The following officers were elected for the ensuing year: President, J. K. Warren, M.D., of Worcester; first vice-president, W. H. Tobey, M.D., of Boston; second vice-president, Laura M. Porter, M.D., of Boston; secretary, L. A. Phillips, M.D., of Boston; treasurer, J. H. Sherman, M.D., South Boston. The address of President Geo. R. Southwick, M.D., was one of unusual interest and contained many suggestions for the consider-

ation of the society which could not be hastily acted upon. The address was therefore referred to a committee which shall report upon its proposals at the next meeting of the society.

Dr. E. O. Wright reported upon the progress in gynæcology in a very interesting paper, in which Apostoli's treatment of uterine fibromata and Tait's operation for ruptured perineum were the chief topics. These were discussed by Drs. Whitmarsh and Boothby.

Progress in surgery was reported by N. W. Emerson, M.D. Wyeth's new bloodless operation for amputation at the hip-joint, and the present ideas of treatment of appendicitis being its prominent features, and these were discussed by Dr. Boothby.

A very valuable and practical paper upon the treatment of rectal fistula was read by Dr. F. W. Halsey, the indications and contra-indications for the different methods of treatment receiving special attention. This subject was discussed by Drs. Warren, Boothby, and Chase.

A very bountiful repast occupied the next hour, after which Dr. E. B. Hooker of Hartford, who had kindly consented to contribute to our entertainment, read a very enjoyable and instructive paper on "Surgery of the Nose and Naso-Pharynx." Dr. H. P. Bellows, who had been invited to open the discussion upon this paper, added much of value and interest in his remarks. Dr. Chase and Dr. Boothby also participated in the discussion.

Although the hour was late when this subject was dismissed, a goodly number still remained to enjoy the paper on the "Treatment of Chronic Metritis as applied by Apostoli," by Dr. Eliza B. Cahill. After a brief discussion by Dr. W. H. White, at 10.30 P. M. adjournment was voted.

L. A. PHILLIPS, M.D.,
Secretary.

BOOK REVIEWS.

THE MEDICAL STUDENTS' MANUAL OF CHEMISTRY. By R. A. WITTHAUS, A.M., M.D. William Wood & Company. New York, 1890.

That this manual is now issued in a *third* edition is in itself an evident recognition of its usefulness. The work has been brought

up to the present standard of chemical knowledge, especially with regard to the orthography of certain words. Such words as chlorine, iodine, chlorides, etc., now become chlorin, iodin, chlorid. We can especially commend the author's teachings on the subject of carbon compounds, as intended to impress the medical student with correct ideas on the relations of organic chemistry to physiology.

BACTERIOLOGICAL TECHNOLOGY. By Dr. C. J. SALOMONSEN. Authorized translation from the second revised Danish edition by William Trelease. William Wood & Company. New York, 1890.

This work is intended by the author to serve the needs of the busy practitioner. The simplest and most easily managed apparatus and methods are described, so that any physician can, by following the technique laid down in the work, equip a home laboratory at small expense. The descriptions are exceedingly practical, and to those who desire to verify or to disprove the various teachings of bacteriology this book will be a valuable addition to their library.

CLINICAL MATERIA MEDICA. By the late E. A. FARRINGTON, M.D. Second edition. Hahnemann Publishing House, Philadelphia, 1890.

Ever since the first edition of this work appeared on our desk it has been a most faithful and reliable companion. Its masterly comparisons of remedies have assisted in curing many difficult cases, and we have interlined and annotated its pages until we are loath to exchange it for the new issue. But the new edition ought to be in the hands of those who have not the first; the publishers have given it an improved appearance and a careful revision has eliminated some of the errors that marred its pages, so that, with the exception of a few omissions in the therapeutical index, the new edition is quite perfect.

MATERIA MEDICA OF THE URINE AND URINARY ORGANS. By WILLIAM D. GENTRY, M.D. Hahnemann Publishing House. Philadelphia, 1890.

Gentry's wonderful Concordance Repertory is hardly under way when this new work appears with his name attached. In some of its features the idea of a rubrical and regional text-book of materia medica is an improvement upon many of our authorities. The spaces for interlining will fill a want that has long been required, both for recording new symptoms and for the purpose of noting down brief comparisons. But, as a work on materia

medica, its usefulness might be much further extended if the author would indicate by some distinguishing mark those symptoms of each drug which stand out most prominently in its pathogenesis; as it is, the present condition of the book gives to all symptoms equal value. Although the author has endeavored to be thorough in collecting drug symptoms we find, even on cursory examination, several omissions. Neither zingiber nor linaria are given; the former having "suppression of urine," the latter, "enuresis with frequent painful urging to urinate, causing the patient to rise at night." Under cochlearia we might add, on good authority, to the author's list the symptom "urine becomes thick like jelly on standing." There probably was a doubt in the author's mind as to whether *uræmia* and *uræmic convulsions* should find place under some other division of his work or whether it should be entered as a concomitant of the condition of the urine and urinary organs. But since we find "uræmia" recorded under several remedies it will be necessary to criticize its omission under ammonium carb., cuprum, cannabis ind., and especially aurum triphyllum, a drug standing out so prominently in the uræmia of scarlet fever. We would like to see this plan of "a regional text-book" succeed, as it would greatly simplify some of our work, but a work of this description will need more careful revision than any author can give it single-handed.

TRAITÉ DE GYNÉCOLOGIE CLINIQUE ET OPERATOIRE.—Par S. Pozzi. G. Masson, Editeur. Paris, 1890.

Of all the works on gynæcology which have appeared during the past year, Pozzi's "Treatise on Gynæcology" is the best in many ways. The author, though his experience in this line is very extensive, has not filled the book with egotistical views of his own to the exclusion of the ideas of others; neither is it essentially a text-book of *French* gynæcology, for the original work of others, whether German, American, or English authors, is given due prominence without a trace of jealousy. This shows that Pozzi is broad-minded and imparts a tone to his work that is very refreshing after reading some of our egotistical writers. His broad-mindedness is further extended into conservatism, for we find him endeavoring, in speaking of the newer subjects of gynæcology, to establish careful boundary lines for operative treatment. As an excellent feature of the book we note the cuts which so profusely illustrate every subject. They are of the greatest value in teaching operative technique, and to those unfamiliar with the rarer gynæcological operations they explain each stage of the procedure in a very practical manner. One thing can be said of these cuts, which can be said of very few other works of the past few years, they are all, except a very few,

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original. And what we say of the cuts applies as well to the remainder of the work. There are no long garbled extracts from other authors, references there are in plenty, but what the author has to present is given from his own experience, even that which concerns such new subjects as tuberculosis of the female genitalia and disease of the tubes. Fibrous growths of the uterus occupy fifty pages and are given a thorough discussion. The eighty-eight pages devoted to tubal diseases contains the very latest pathology and operative treatment. Probably the masterpiece of the work is the chapter on genital tuberculosis, as this new subject is very exhaustively discussed. "Retention consecutive to genital atresia" brings the book to an end at 1100 pages, and glancing back over the notes we have made in its margins here and there, it only remains to repeat that Pozzi's Treatise is the best gynæcological work we have reviewed for some time.

TRAITÉ PRATIQUE D'ACCOUCHEMENTS. Par DR. A. AUVARD.
Octave Doin, Editeur. Paris, 1890.

Dr. Auvard has already made a prominent place for himself in obstetrical literature by his original researches and now that he presents a complete work on this subject we are inclined to give it a friendly reception. His style is rather peculiar, but is none the less instructive. His method of teaching consists in advancing first a brief summary of arguments and then dwelling at length upon each point. The student has thus the arguments briefly stated in connected relationship and can easily refer to this summary if he becomes confused on any point. The chapter on auscultation as a diagnostic factor in pregnancy is an excellent feature and presents some quite original diagrams for the determination of the position of the fœtus, but then we can say the same of every chapter in the book, that each section is presented in an original manner and illustrated by original cuts. In considering the pathology of labor the author conveys very precise directions as to the conduct to be followed. In the chapter on Symphyseotomy Dr. Auvard speaks quite encouragingly of this operation. Finally a brief chapter on legal obstetrics is given, but as the laws are those of France they are of no interest. It is to be hoped that these two works, Pozzi's Gynæcology and Auvard's Obstetrics, will be translated into the English language for in their originality they become worthy of perusal by every specialist.

BOOKS AND PAMPHLETS RECEIVED.

ROTURA EXPONTANEA DE LA MATRIZ. Por el DR. EDUARDO F. PLA.

Dr. Pla's report on a case of spontaneous rupture of the uterus during the fourth month of gestation is contained in a reprint from *La Cronica Medico-Quirurgica de la Habana*. The brochure contains a creditable illustration, showing the rupture as taking place in the fundus at the right angle, extending in a transverse direction.

TRANSACTIONS OF THE MAINE HOMŒOPATHIC MEDICAL SOCIETY.

The transactions of the twenty-fourth annual session contain some very creditable papers, quite a number in the gynæcological line, but unfortunately none available for our pages.

MASSACHUSETTS HOMŒOPATHIC MEDICAL SOCIETY. By-laws, list of members and statistics, 1890.

The Massachusetts Homœopathic State Society have compiled a valuable fund of information concerning the past and present condition of the association. We tender the Society our thanks for the volume.

VAGINAL TAMPONAGE. By CHAS. C. FREDIGKÉ, M.D.

The author is endeavoring to introduce as a uterine support a new rubber tampon, made from some original designs obtained by intra-vaginal measurements and by filling the vaginal cavity in the cadaver with warm glue on the point of congealing. In shape it resembles an asymmetrical pear, the anterior surface of which is rather flat, and shorter than its more convex posterior surface, which is the longest, while the lateral surfaces are equal as to convexity and length. Its superior surface is flat and inclining downward and forward from behind forwards, meeting the anterior surface under an obtuse angle.

AN EXPLANATION OF IMMUNITY AND CONTAGION. By J. W. McLAUGHLIN, M.D.

The author presents quite a little brochure, containing some very careful work in the way of explaining the phenomena of immunity and contagion by reasoning from physical and biological laws.

THE HOMŒOPATHIC JOURNAL OF OBSTETRICS, Gynæcology and Pædology.

A. L. CHATTERTON, EDITOR AND PUBLISHER.

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1. All articles or communications to this journal should be exclusively for its pages.
2. For the convenience of subscribers, this journal will not be discontinued until so ordered.

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VOL. XIII.

EPISIOTOMY (INCISING THE VULVAR RING TO PREVENT A RUPTURE IN THE LAST STAGE OF LABOR).

BY

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In the second stage of labor, just before its completion, we find instances, especially in primipara, where the perineum is greatly distended and pushed forward, but its vaginal ring does not dilate sufficiently to allow the child's head to pass through. With every primipara there is always after delivery a slight nick or rupture; but it is incumbent upon the accoucheur to apply his art and skill, so that the laceration shall not be so extensive as to be abnormal, and give trouble. Slight lacerations of the commissure that occur in a normal labor may be left to nature, as they always heal.

When we have a lingering labor, and the perineum becomes greatly distended, and with every pain the head seems ready to pass through, but still it will not do so, and we are absolutely convinced that the head cannot be delivered unless the perineum is torn, and being cognizant of

the fact that the rupture always occurs antero-posteriorly, are we not authorized to help nature and make an incision laterally, so as to avoid a jagged wound that will not readily heal? I mention the above facts in order to call the attention of the profession to an operation almost entirely neglected in this country—the operation is episiotomy, defined as an incision of the labia, to facilitate labor, and prevent rupture of the perineum. With most American and English authors upon obstetrics, I find little said about it,—by some not mentioned,—but Prof. Lusk, in his excellent work, is an exception. He describes the operation and recommends it. He says it has been denominated “the young practitioner’s operation.” However this may be, I have never seen it recommended or executed by any except old and experienced practitioners, and seldom in America. While a student, thirty years ago, at the University of Vienna, I saw it occasionally practiced in the obstetrical clinic of Prof. Braun. At a recent visit to Vienna in August last, I learned that the operation was still frequently performed in the obstetrical clinic, and I found it also frequently in use at the obstetrical clinic in Wurzburg, Bavaria. Prof. Winckel, in his most recent and excellent “Text-book upon Midwifery,” indorses and particularly recommends the operation. Winckel says that Dr. G. Ph. Michaelis, of Hamburg, was the first obstetrician to make it in 1799, but I find by consulting Ed. Casp. Jac. von Siebold (History of Obstetrics, Berlin, 1839), that Sir Fielding Ould proposed it in 1742, preceding Michaelis by nearly sixty years.*

It will thus be seen that we have reliable and classical authority for the operation. Such being the case, it seems strange that its practice has been almost ignored by English and American accoucheurs.

* “Versuch einer Geschichte der Geburtshuelfe,” von Ed. Caspar Jac. von Siebold, Professor, etc., in Gottingen, Berlin, 1839.

Also “A Treatise on Midwifery,” in three parts, by Fielding Ould, Man-Midwife, Dublin, 1742. (Second Edition of the same published in London, 1767.)

We shall take it for granted that every obstetrician who attends a woman in labor, with a rigid perineum, in order to facilitate the expulsion of the foetal head has applied diligently cloths dipped in hot water (well wrung out) to the perineum, and has also, during the interval of a pain, well lubricated or pushed into the vaginal ring a good portion of either warm lard or vaseline. This little practical procedure helps to relax and distend the perineum in a wonderful manner, and in my practice by its use I have certainly assisted hundreds of women in the last throes of labor, and thus hastened the delivery and saved the perineum from rupture.

Indications.—Toward the end of the second stage of labor, when, in the judgment of the physician, the threatened destruction of the perineum seems inevitable, he is then justified in resorting to the operation of episiotomy. The obstetrist can decide this question if the tension of the vulvar ring is so great that with every pain rupture seems inevitable; then, in order to prevent this, an incision should be made each side of the central raphe.

Another reason for the operation is that an incised wound, situated laterally, heals more rapidly than a tear caused by an undue stretching by the child's head, and centrally situated.

Operation.—The operation is not one of *election*, but one of *necessity*. Generally anæsthetics will be required to assist in dilating the vulvar ring. I usually employ either a pair of angular scissors, a blunt-pointed bistoury, or a hernia knife. In one instance, I was obliged to use an ordinary scalpel out of my pocket case. It is preferable to make the incisions during a pain, when the ring is tense. Before making the incision, it is best to retract the external skin a little. An incision is to be made on each side, about an inch anterior to the posterior commissure, that is about midway in the posterior quadrant of the vulvar circle, and extend each incision three quarters of an inch. When the

head is liable to be momentarily expelled, and a knife or scalpel must be employed, it may be introduced flat, between the head and vagina, and then turned so as to make the section from within outward.

After the delivery, should any hæmorrhage set in from the cuts, then it will be best to unite them, using catgut, or even iron-dyed silk. Usually the incisions may be left to nature, and treated antiseptically by the applications of either boro-glyceride, boracic acid, or creoline solutions. We have recently employed as an antiseptic in obstetric practice, creoline, two per cent. solution (one teaspoonful to the pint of water), and have found it more satisfactory than any other preparation. This operation will be especially indicated where faulty presentations of the child obstruct the labor, *e.g.*, in postero-occipital positions; in such a position, when normal rotation does not take place, the perineum is greatly endangered, and episiotomy may be necessary to save it from extensive rupture.

NOTE: In cases where a hasty extraction is demanded in the interest of the child, and a rupture is imminent, and the accoucheur cannot anticipate it, but finds an incipient tear already commencing in the raphe, and that it must extend before the head can pass, the lateral incisions should even then be made, so as to prevent a destructive laceration in the median line.

A FEW MORE OBSTETRICAL DON'TS.*

BY

SHELDON LEAVITT, M.D.,

Professor of Obstetrics in Hahnemann Medical College and Hospital, Chicago.

1. Don't immediately tie and cut the umbilical cord.

There are several reasons why we should follow this injunction. It is said that, if we wait till the new foetal circu-

* Notes from a Lecture.

lation be well established, the child is left more vigorous, and, on the whole, does better. Then again, if the cord be severed before the circulation through it has ceased, there will be much greater danger of hæmorrhage. This is not very likely to occur unless the cord happens to be unusually large at the point where the ligature goes on, in which case the ligature, though tightly applied, will occasionally, especially in a crying child, permit some blood loss.

2. Don't make a strenuous effort to deliver the placenta until the uterus contracts with force.

Danger of post-partum hæmorrhage is increased by premature delivery of the placenta. Hæmorrhage after labor is nearly always due to a flaccid state of the uterus; and to draw away, or even press away, the placenta without reference to this favorable condensation of the organ, would necessarily expose the woman to increased danger. Then, too, it is much easier to deliver the after-birth when its expulsion is aided by uterine contraction.

3. Don't make forcible traction on the umbilical cord for the purpose of delivering the placenta.

There is probably little danger of inflicting serious injury by making such traction, but there is a possibility of it. Complete inversion has been known to arise from this cause. Moreover, by making such traction, we cause the placenta to engage the os in the shape of an inverted umbrella, and, owing to the greater demand thus made on the os, greater resistance is offered to its passage. The cord sometimes breaks under slight traction; but this is a matter of little consequence, as the placenta can readily be delivered by Credé's method.

4. Don't permit the placenta to remain undelivered more than an hour.

I am well aware that some excellent practitioners advocate but little interference even though the placenta remain behind for hours. They believe that the homœopathic remedy should supply every natural deficiency, from turning

the child in utero, down to the last act in the parturient drama. The intention of this is to dignify homeopathy, but I truly believe it has the opposite effect. Our remedies will do wonderful things, but they will not do everything. Some may call it meddlesome midwifery to introduce the hand and remove the placenta, even after an hour of patient waiting and the use of every ordinary expedient without avail, but I do not. I am just as reluctant as the average practitioner to thrust my hand into the womb; yet under such circumstances, there is less likelihood of harm resulting from interference, if carefully done, than from longer delay. In all my practice I have had occasion to perform this operation but twice, for the reason that moderate traction on the cord and firm pressure on the fundus have been effectual.

5. Don't withdraw the hand which has been passed into the uterus to remove the placenta, until the womb contracts.

Failure to observe this precaution may result in post-partum hæmorrhage.

6. Don't forget to examine the perineum immediately after delivery.

A careful examination should be made in every instance; but this does not always involve exposure and ocular inspection, though in primiparæ this ought always to be done. In other cases the finger in the anus and the thumb in the vagina,—if the touch is accustomed to the feel of the unbroken perineum,—will, in most instances, readily discover a serious solution of continuity, if one exist.

7. Don't forget to keep the hand on the contracted globe of the uterus for several minutes succeeding delivery.

Neglect of this is altogether too common. The only serious cases of post-partum hæmorrhage that have ever come under my notice were those in which it was wholly neglected, or in which it was not sufficiently prolonged. It need not be the hand of the physician, as that of an intelli-

gent nurse, or other attendant, will answer every purpose; and yet I usually make it my own business to attend to this matter. I am disposed to regard it also as a preventive or modification of after-pains.

8. Don't permit the woman to be left alone for a single minute during the first hour after delivery.

This is an hour of peril, and we should be on the alert. The womb, the face, the pulse, and the movements of the woman need constant attention. After reaction has set in and the vital forces have become accustomed to the new order of things, she may, for a few minutes at a time, pass out from under the eye, but not before.

9. Don't leave the house within an hour after delivery, under ordinary circumstances, and not for several hours if there has been serious loss of blood, or other alarming complication.

This requires few comments. The conscientious physician is always willing to sacrifice his own comfort for his patient's good. By tarrying a little longer than usual in a suspicious case, he may be able to rescue the helpless and confiding woman from extreme peril, and perhaps from death. "It is the last straw which breaks the camel's back."

10. Don't leave the patient after delivery without instructing the nurse to put the baby early to the breast.

That is, in ordinary cases, within two or three hours. This is much better for both mother and child.

11. Don't reject the binder for a puerperal woman.

Not that it is always advisable to use it, for there may be times when it should be omitted. Occasionally patients object to it, and then it would be as unwise to insist on it as at other times to omit it. If for no other purpose, I would use the bandage for the comfort which it affords the woman at a time when she needs a little firm support, as she thinks, to hold herself together. As to the harm which some say a bandage is likely to do, I believe it exists

chiefly in the minds of those who object to this gentle support of the relaxed abdominal parietes.

12. Don't get a notion that the "caul," or "veil," or "hood," sometimes found on the head of a new-born infant, or in which the child may be wholly inclosed, and which parents interpret as signifying a happy future, is a special membrane.

A physician once offered to exhibit to me one of these veils, which he had carefully preserved as a rare specimen, and which he evidently regarded with some veneration; but I assured him that I had no desire to see it, as I had seen many membranes. It is needless for me to say that these are only the ordinary foetal envelopes.

13. Don't let the umbilical cord go unligatured.

All innovations are not improvements. I have no doubt that the cord would do well enough without a ligature in most cases, but occasionally one would bleed. If the gain were sufficient to warrant some risk to reputation I would say it were well; but in my judgment it is not. The cord has been tied from time immemorial, and all the laity expect it to be so treated. If we fail to follow the usual custom and bleeding were to occur, we might meet a scathing rebuke. This is especially true of young practitioners, against whom, in the eyes of their clientage, such an accident would stand as an evidence of incompetency. Whatever others may advise, my caution to you is to follow, in such matters, beaten paths.

14. Don't let the nurse wash and dress the baby until the mother has been cared for.

Some nurses, when they get possession of the baby, start off at once to wash and dress it, without reference to the comfort or convenience of the mother, and you will have to restrain them. The baby will take no harm from lying a little while in its untidy state, while the mother may. At the same time the child should not be wholly neglected. Instruct the nurse occasionally to examine the respiratory

action, and notice the stump of the cord. A large cord will sometimes bleed even when tightly tied, especially when the child cries vehemently, and the accident should not be allowed to occur without meeting with prompt arrest.

15. Don't permit the nurse to wash the baby without first giving it a good inunction.

Of course there are few nurses who would neglect this precaution; but they are occasionally met. Previous application of oil enables the soap to remove the sebaceous matter which covers the child, with the minimum amount of scrubbing. Where it is omitted the baby is quite sure to be made a martyr.

16. Don't put much pressure on the child's head with a view to mold it into symmetrical shape.

Perhaps the better instruction is to let it severely alone. I have never resorted to any such treatment myself. The head will take care of itself. It may be long-drawn-out, but vital action will manage to bring it into proper form, while interference may do harm.

17. Don't allow the nurse to press the breasts of newborn children.

Girls are the ones thus imposed upon, under the impression of the nurse that the future functional activity of the mammæ will thereby be better insured. I believe this to be unmixed error, and advise "hands off."

18. Don't venture an assertion of over-maturity of the child from its appearance.

This I say because the objective indications of over-maturity are unreliable. "Trust not to appearances."

19. Don't rashly pronounce a child immature. Scrutinize it closely, inquire carefully into the history of the case, and make due allowance for errors.

If you fail to do this you may regret it.

20. Don't allow urinary accumulation to go on many hours after delivery.

If the bladder was emptied in the latter part of the first

stage of labor, and the second stage be not unduly prolonged, the patient may be allowed to go four or five hours after delivery without attempting micturition. I usually make my first visit about six hours after labor, and at that time make inquiry with respect to the bladder, and if the attempt has not been made, or if there has been failure to perform the act, I instruct the nurse to give the woman another opportunity while I am in the house. If this effort ends in failure, I resort for a few hours to remedies, and these failing have recourse to the catheter. In the absence of special contra-indications I permit the sitting posture in the last attempt at voluntary urination. The result is that I have few patients upon whom the catheter is used. We should recollect that the bladder, after labor, may be distended, and yet the woman have no urgent desire to evacuate it.

21. Don't allow a slovenly nurse to go unrebuked.

The use of antiseptics is to be commended; but to employ the best antiseptic precautions we must attend to strict cleanliness. Untidy nurses are the physician's worst enemies. They can easily undo and render unavailing the most careful and considerate treatment. Dirty hands, dirty sponges, and dirty clothing are capable of working ruinous effects. If you see a love for these in the nurse, warn her of the consequences, and if she reform not, insist upon her discharge.

22. Don't tell a woman, because she has had a difficult and dangerous labor, that she cannot live through another.

What has been done can be done. I have met a number of such patients, and all of them have come through their subsequent labors in good form. In the absence of great pelvic deformity, the physician is not justified in making such a statement. The next labor may be easy. Besides, such predictions are resilient, and they may rebound to the injury of your professional acumen.

REPORT OF DERMOID CYST OF THE RIGHT OVARY.*

BYEDWIN H. WOLCOTT, M.D.,
ROCHESTER, N. Y.

May 24, 1884, a patient, aged thirty-eight, married seventeen years, but never pregnant, and with a family history of tumor, consulted me with reference to a growth in the right ovarian region. It had been treated for fifteen years by various physicians, who agreed that it was a fibroma not calling for surgical interference, as it would cease growing or be absorbed at the climacteric and give the patient no further trouble, the principal thing being to maintain her general health,—an opinion not altogether objectionable for a fibroma, but entirely so for a dermoid cyst, which, if allowed to remain, would produce local inflammation, especially in the peritoneum, and would have a tendency to suppurate as the patient approached the “change of life.”

When the patient came to me the tumor was about three inches in diameter, hard as a billiard ball, and attached, apparently, to both the ovary and the uterus. The tumor had not interfered to any extent with her general health, except by causing a constant uterine hæmorrhage and leucorrhœa; for from May 24 to July 25, 1884, she was treated almost constantly for these difficulties and without any perceptible benefit. She had various remedies and many different kinds of injections. While studying the case for something to control these conditions I found in Ludlam (p. 1063) that trillin 3x was recommended as of great value in hæmorrhage caused by fibroma of the uterus. Accordingly this drug was prescribed, and when I tell you that to control this

* Read before the Homœopathic Medical Society of the State of New York at the annual meeting held in Albany, February 10 and 11, 1891.

hæmorrhage, without disturbing normal menstruation, only six prescriptions were necessary in six years, you will agree with me when I say that either nature was wonderfully obliging or that the trillin possessed a remarkable influence over this condition. The dates of these prescriptions are as follows: July 25, August 11, September 17, and December 31, 1884; June 11, 1885, and March, 1890. From March 28, 1885, to May 15 of the same year, the patient suffered with a severe attack of catarrhal pneumonia and palpitation of the heart, that have been more or less troublesome ever since; especially between February 17 and April 18, 1890, when from this condition she was confined to her room the greater part of the time.

The asthma (for this is the form it now assumed) was doubtless materially aggravated by the presence and reflex influence of the tumor. For since its removal there has been great relief in this respect. From May 22 to about July 15, 1890, she was dangerously ill with peritonitis. When she had sufficiently recovered, a removal of the tumor was advised, fearing a return of the inflammation with a probable fatal result. This opinion caused some surprise, but upon reflection was more favorably received and she finally consented to an operation, and accordingly presented herself at the Rochester Homœopathic Hospital, where the operation was performed by my friend, Dr. J. M. Lee, assisted by myself and six nurses. September 16, 1890, she entered the hospital, and on the following morning was placed under the influence of chloroform (ether being contra-indicated on account of the bronchial asthma), the abdomen opened, and the tissues exposed. On passing a finger into the wound the tumor was found to be quite immovable, as encapsulated by numerous coils of intestine, omentum, uterus, and other structures firmly bound together by adventitious tissue. There was but one point of the tumor exposed to view and here the enucleation was begun. Gradually the adhesions were separated, chiefly by the fin-

gers, and the growth brought out through the wound. The pedicle was very broad and thick, and appeared to emanate from the broad ligament and horn of the uterus. It was secured by four strong silk ligatures and divided with the scissors. Several bleeding points were also secured by cat-gut ligatures, the abdomen carefully flushed out with hot water, and the wound closed with silk-worm-gut around a large Thomas drainage tube.

The wound was supported with adhesive straps, dressed with calendula gauze and protected by cotton, which was retained in position with a flannel binder. A gutta-percha protective was placed over the end of the tube, which was plugged with cotton. More cotton was placed over this as a pad and the gutta-percha tissue protective folded over the cotton and pinned. The patient was then removed to her bed apparently free from shock. A few drams of bloody serum was drawn from the tube every two hours during the first two days; at the end of which time the quantity being small and the color light the tube was removed. During the first forty-eight hours after the operation, the patient was not allowed any food or drink except frequent enemas of warm water per rectum. These not only furnished a supply of water to the body, but relieved the bowels of gas which at times was quite considerable and annoying.

From the time of the operation until the tenth day, the temperature and pulse remained practically normal. Then a large stitch abscess began developing near the umbilicus, causing considerable temperature and pain. After the abscess suppurated the patient made a rapid recovery, and was discharged from the hospital at the end of the fifth week. The medical treatment, aside from strict asepsis which is the general rule of the institution, consisted simply in the administration of a few doses of acon., ars., and hepar. sulph., according to the respective indications, no morphine or other anodyne being used. The patient has menstruated regularly since leaving the hospital, and is now perfectly

well, except an occasional hot flush due to her age, and nas gained ten pounds in flesh.

The tumor was about five inches in diameter and weighed eight pounds. A section showed accumulations of pus and bone-like formations. A cavity was found in the tumor about the size of a goose egg, indicating that the tumor was breaking down, and in all probability this degeneration would have extended to the surface of the tumor within a year and have caused death by septic peritonitis.

PROGRESS IN GYNÆCOLOGY.

BY

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The scope of the subject to which I invite your attention depends entirely upon what we understand by the term "progress." In its widest sense and freest acceptation it undoubtedly includes every new idea and every innovation upon established methods, though but the conception of a day. The true scientific application of the term, however, I conceive to be much less comprehensive in its meaning. Undoubtedly many of the innovations of the present year will ultimately be entitled to an honorable place in the ranks of true progress. The mere badge of novelty, however, is insufficient to commend any new procedure to conservative minds. The reaction of professional opinion and the attention of rival schools are necessary to shape a real gem of scientific method for its proper place. This process of necessity requires the lapse of years and oftentimes the name and the general technique of a procedure are thoroughly familiar before its legitimate sphere has been determined. Requiring, therefore, the existence of a matured and definite

professional opinion upon a procedure as its title to recognition, we approach our subject.

During the year now so nearly ended perhaps no one theme has aroused such universal interest among gynæcologists as the electrical treatment of female diseases. It is true that the application of electro-therapeutics to this class of maladies is by no means a new departure, dating back as it does some twenty years. Until a comparatively recent date, however, the vague and desultory manner of its employment tended rather to prejudice the minds of the profession against it. In 1883 the systematic use of electricity according to definite scientific principles was advocated by Apostoli of Paris, and its therapeutic value clearly defined.

As is often the case with the originator of a new departure, Apostoli is an enthusiast and arrogates far more success and a wider range of application for his treatment than others can substantiate. Although recommended at present for numerous diseases and morbid conditions of the female genital organs, the real question of the efficacy of Apostoli's treatment is in its application to uterine fibromata. In order to discuss the subject from a correct standpoint it is necessary to understand what Apostoli himself claims for his treatment. The leading points are as follows :

1. The use of the bare intra-uterine electrode of platinum as the positive pole, and a large moist clay electrode on the abdomen as the negative pole. This intra-uterine electrification is harmless if antiseptic precautions are strictly observed. The electrolytic properties of the galvanic current are well known, and as the positive pole attracts the acids of the tissues, thereby coagulating the contents of the vessels in contact with it, abnormal discharges, as hæmorrhage and leucorrhœa, must cease.

2. Apostoli regards our pathological nomenclature of para- and perimetritis as absolutely wrong, and proposes to substitute therefore salpingo-ovaritis to indicate an exten-

sion of the endometritic process. This he conceives to be due to microbic action, and therefore cured through the remarkable antiseptic and germicide properties of the galvanic current.

3. Priority in the use of heroic doses of electricity, *i.e.*, currents of 50 m. and upwards, gradually increased to the limit of tolerance. The use of currents of great strength, 100 to 150 or 200 m., is made possible only through the use of an external electrode of large size to disperse the current and to distribute the points of entrance through the skin. Beginning with a current of 20 to 40 m. the strength of the current is gradually increased to the limit of tolerance, which is usually from 70 to 100 m. Tolerance is naturally progressive, and, as treatment proceeds, a current which would not only be unsafe but positively unbearable, at first, is well borne. The sensitiveness of the endometrium in these cases is the best and safest gauge of the strength of the current.

4. Absolute safety if the diagnosis is correct. This point certainly has the convenient merit of preserving the reputation of the treatment by throwing the responsibility for any lack of success upon the practitioner himself. The cases of death from the treatment have been due to mistaking fibro-cysts for simple fibroids, or in rupturing a pyo-salpinx whose existence was unsuspected.

5. Apostoli claims that his treatment is sufficient in itself to supplant surgery in most cases of fibromata.

6. The use of galvano-puncture by means of needle or dagger-shaped electrode points of steel or platinum when the other method is ineffective, *i.e.*, when the uterine cavity is inaccessible to the round-shaped electrode.

7. Relapse is the exception, and in most cases the results are permanent after treatment of sufficient duration.

8. An anatomical reduction in the tumors not entire, but partial. This last point is an important one, and has aroused more controversy than any other in connection

with the treatment. Apostoli's own words are as follows: "The intra-uterine galvano-caustic action causes a rapid diminution in the size of myomata ($\frac{1}{2}$ to $\frac{1}{4}$), especially that of the interstitial ones, but not their entire disappearance. It restores perfectly the health of the patient, as it removes the pain and stops the hæmorrhages."

The distinguishing marks of originality in Apostoli's treatment are these :

The application of currents of great strength. Neurologists employ from $\frac{1}{4}$ m. to 2 m., while Apostoli averages from 70 to 100 m.

Measuring the current by means of an accurate galvanometer instead of by the number of elements as formerly.

The introduction of one pole into the uterine cavity or into the uterine tissue, thus increasing its action. Galvanic currents were previously applied to the cervix by means of a ball-shaped electrode.

The remarkable uniformity in the results of the treatment, is no doubt due to the bold application of heroic doses. It is a well-known fact that the application of electricity to nervous diseases, for instance, is singularly variable and uncertain in its results, succeeding brilliantly in one case while failing absolutely in another to all appearances precisely similar.

As is frequently the case the disciples of Apostoli have in numerous instances outstripped their master in their extravagant demands for the success of the method, and have thus fostered the extremes of sentiment on the subject which we observe at the present time.

The one extreme is represented by Spencer Wells and Keith. They predict a most brilliant future for the method, and the displacement by it of ovariectomy and hysterectomy for fibromata. They have practically applied the treatment, and substantiate their claims by a convincing array of results. They even claim in numerous instances not only the speedy and permanent relief of morbid symptoms, but the entire

disappearance of the tumor as well. We have noted above that Apostoli claims only a partial reduction in the bulk of the tumor.

On the other hand, and at the opposite extreme as well, we find Tait most vehemently opposed to the method. The delay incident to its employment is not, in his mind, the only serious objection to it, but the production of inseparable and universal adhesions, matting together the pelvic viscera and forming a complication of the gravest character. The cases now coming into the surgeon's hands, complicated both by delay and by treatment, are certainly among the most serious on record, and we cannot wonder that from Tait's standpoint the treatment is barbarous and criminal. All these cases he assumes must finally come to operation and no treatment at all is vastly better than the electrical.

Every new departure, if it possess any merit whatever, seems destined to follow the universal law and to oscillate like the pendulum between the two extremes of unqualified approbation on the one hand, and unqualified disapprobation on the other, and "Apostoli's treatment" is certainly no exception. While far from concealing the claims of the over-zealous advocates of the method, we are convinced that many of the cases upon which so eminent a gynecologist as Tait bases his sweeping condemnation are evidences of the misapplication of the method, and consequently no argument against its correct use. Indeed, the majority of unprejudiced observers occupy the middle ground between these two extremes.

Last year it was my fortune to observe the results of "Apostoli's treatment," extended over a period of six months, in a considerable number of cases of uterine fibromata. I am not a practical electrician myself, and there is much in the technique of the method I do not understand, and it is only upon the basis of results that I can speak from experience. The precepts of Apostoli were followed most strictly, and

only the cases distinctly emphasized by him as especially indicating electrical treatment, namely, interstitial fibroids, were so treated. Hæmorrhage and pain were present in every instance. The treatment was given once a week only, and the patients were allowed to return home, walking in most instances. The galvano-puncture I have never seen employed, it being regarded by my instructors as far more dangerous than laparotomy under similar circumstances on account of the great danger of decomposition after the capsule of the tumor has been penetrated. The danger also of bursting a pyo-salpinx is by no means inconsiderable. As far as the symptoms induced by fibroid were concerned, namely, hæmorrhage, pain, and the various reflex neuroses, the record of the treatment was uniformly good, although not permanent in its results in all cases even after prolonged treatment. In some instances there is apparently a shrinking of the tumor, very slight; but whether this is due to the effect of the current upon the accompanying metritis or upon the tumor itself is a matter of doubt. The electrolytic action of the galvanic current in diminishing the weight of freshly extirpated myomata, to my mind proves nothing, as the important factor of circulation, through which all beneficial influence is exerted, is entirely absent. In the living body the action of the galvanic current upon the blood-vessels results first and temporarily in increasing their caliber, and later and more permanently in diminishing it. This action would in most cases account for the speedy disappearance of the invariably associated metritis and endometritis with the cessation of hæmorrhage. No inhibitory influence upon the trophic nerves governing the blood supply of the tumor, beyond that sufficient to prevent further growth, has been observed by the majority. The effect of the current in brief is threefold: a physical effect due to the liberation of gases around the electrodes; the purely chemical effect due to the electrolysis or separation of the salts of the body into acids at one pole and alkalis at the

other; and lastly, the physiological effect, which is most important of all in its direct influences upon blood-vessels, absorbents, nerves, and living cells, and about which, unfortunately, we know the least.

The consensus of opinion among conservative gynecologists who have conscientiously tested the treatment is, that altogether it is rather disappointing. There is no doubt, however, that the tendency to operate upon insufficient indication has been markedly repressed. It is also certain that by its employment a fairly good number of cases can be made comfortable until the menopause, which usually ends suffering from this cause. Most patients regard themselves cured, even though the tumor remains, because the troublesome symptoms of hæmorrhage and pain cease, and the mental relief thus afforded reacts favorably upon the general condition.

The complications of colic, pelvic peritonitis, and cellulitis I have observed somewhat frequently, but in justice to the treatment it must be stated that every instance occurred in patients who could not give themselves proper care thereafter. As before remarked, the cases (some fifty in number) which I have personally observed were most carefully selected and were most favorable for electrical treatment, and upon the results obtained I base the following conclusions:

The electrical treatment of uterine fibromata can be regarded at present as reliable in relieving symptoms only.

The relief of hæmorrhage is singularly uniform and speedy, and as the alarming symptom in uterine fibromata is hæmorrhage and all symptomatic treatment is directed to its relief, the method is entitled to fair trial on this ground alone.

Pain is also relieved in most cases speedily, but it frequently recurs, as does the hæmorrhage, in spite of long-continued and well-directed treatment.

The most favorable cases are small interstitial fibroids in women reasonably near the menopause.

The reduction in size of the tumor is insignificant. The beneficial effect of the treatment is due to its favorable influence upon the accompanying metritis and endometritis.

Electrical treatment accomplishes no better results than other measures of a palliative nature. I have seen fully as good results from the subcutaneous injection of ergotin. Both methods are empirical, and electricity is often effective where other measures are not, and thus becomes an additional resource at our command.

The effect of the treatment upon the general health is undoubtedly good, and marked relief of nervous symptoms often follows.

Finally, electricity is no universal panacea, and the oscillations of the galvanometer are by no means like a compass needle, pointing to assured success. It has a limited range of usefulness in controlling hæmorrhage and relieving pain. That it permanently cures any morbid condition whatever is not proven.

Any contribution to the treatment of acute gonorrhœa in women is welcome. The latest method consists in rubbing off the epithelium of the whole vagina, thus destroying the nidus of the gonococcus. The membrane is exposed and put upon the stretch by means of duckbill specula. The surface is rubbed with a wad of gauze dipped frequently into a 1-1000 solution of sublimate. The oozing of bloody serum indicates the proper depth. The vagina is then packed with gauze, wet with the above solution. This is renewed daily after copious injection with the same solution. The duration of the treatment is from a week to ten days and ends the attack. It is not followed by complications. I can vouch for its efficacy in three cases of acute gonorrhœa. It goes without saying that this "sandpapering" method is heroic, and to those who have been accustomed to regard the disease as self-limited and not particularly serious, it will seem unnecessarily severe. To those, however, who believe that the disease in women is practi-

cally incurable when once the uterine canal "has taken fire," and who have observed the melancholy train of disease consequent upon it, no procedure is too radical, if effective.

In this connection, and with special reference to chronic gonorrhœa, it may be well to note the fact that in spite of numerous claims to the contrary the presence of the gonococcus is now generally accepted as pathognomonic and the routine examination under the microscope of every pathological discharge from the uterus or the vagina cannot be too highly commended. It is true that the gonococcus cannot always be demonstrated in chronic gonorrhœal discharges any more than the tubercle-bacillus can always be demonstrated in the sputum of tuberculous patients; but while bearing in mind the fact that its absence is not necessarily proof to the contrary, its presence must be regarded as indubitable evidence of the disease. While acute gonorrhœa from illicit connection is exceedingly rare in respectable women, the fact remains that in respectable men it is lamentably common, and in its chronic or imperfectly cured form is too frequently transmitted to a perfectly innocent wife. In such cases we, of course, have no history of the acute process, as in the chronic process the gonococci have lost a measure of their virulence before infection, and only vague, uncomfortable symptoms exist, which point to nothing in particular, but which obstinately resist all treatment except specific. In such cases an examination of the discharge will often indicate the only method of cure.

A new antiseptic of special use in gynæcology, creolin, deserves a few words. The virtues of this substance are not strictly new, for it possesses those of the phenyle group, of which it is a member. It is safer to handle than carbolic acid and can be used in larger quantities and in stronger solutions without fear of poisoning or inflammation. In five per cent. solutions it has been tested in numerous cases

of gonorrhœal vaginitis and cystitis, also in purulent endocervicitis, with the best of results. It seems to possess a positive germicide effect upon the microbes of gonorrhœa, and a peculiar power in checking suppuration. In the Prag Maternity it was frequently employed as a uterine injection after an instrumental or manual delivery. Aside from its antiseptic properties, in these latter cases, it seemed to possess considerable virtue as a vulnerary, removing speedily the soreness and irritation incident to operation. In pelvic abscess, also, where considerable quantities of the distending irrigation are unavoidably retained, its comparative innocuousness might recommend it to trial.

A few words now, and lastly, regarding the efficiency of Lawson Tait's operation for ruptured perineum. The technique of the operation is familiar to all. The great advantages of rapidity and simplicity of performance and the small amount of after treatment required are conceded by all. The serious objection to its use is that it fails to restore the perineal body, and consequently is "all on the outside." That this objection arises from a misconception of the theory of the operation, I am thoroughly convinced. No operation is more difficult of demonstration upon paper than this, nor do I know of one whose topography changes so strikingly as the operation proceeds. The typical operation, as applied to partial perineal laceration, if correctly performed, is precisely the same in principle as Emmet's, Simon's, Hegar's, or any of their innumerable modifications, with this addition and difference only. In the older denudation operations the cicatricial tissue is entirely removed and the freshened surfaces brought together. In Tait's operation the dissection is made from the horizontal incision in the skin surface of the perineum, under the cicatricial covering of the rent, to the angle of the tear in the recto-vaginal septum. It is thus clear that the torn surfaces are freshened under the cicatrix, which latter, being left intact, forms a protecting roof over the apposed surfaces of

the torn muscles and favors prompt union. Manifestly, the thoroughness with which the denudation is accomplished determines the *restitutio ad integrum* of the perineum. If Emmet's operation were performed with the same lack of conception of the true principle of the procedure, it, too, would be "all on the outside." Tait's operation has the great advantage of uniformity in its method of performance, being precisely the same no matter what the shape or the direction of the tear may be, and in the hands of those who perform it correctly it has superseded all other methods.

DISCUSSION.

Dr. Whitmarsh in his discussion of this subject thought we should exercise charity in considering Apostoli's method, as it has been a comparatively short time on trial. If hæmorrhage is controlled for months, as is claimed, and still more if the size of growths is reduced, the means by which this is accomplished is at least worthy of consideration. But the long time required, and the frequent sittings which seem necessary, are such drawbacks that it cannot be considered a brilliant success.

With regard to Tait's perineal operation he had not tried it, but he had not felt satisfied with Emmet's new operation because it does not restore the perineal body, and if Tait's does this it will be satisfactory. From present knowledge, however, he prefers Skene's operation to any other.

Dr. Boothby thought the treatment by electricity, as applied to fibroids, was likely to fail in many cases, because it is impossible to tell whether or not cystic degeneration has set in, and, if it has, more harm than good is likely to result; and as hysterectomy has of late proved so generally successful, it must generally be preferred to the tedious and uncertain electric treatment.

SOME DANGERS INCIDENT TO GYNÆCOLOGICAL PRACTICE.

BY

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The risks and dangers attending any of the major operations, such as hysterectomy, ovariectomy, or laparotomy for any purpose are always recognized and understood. It is not of these, therefore, I wish to speak, but of some of those incident to minor operations, examinations, and non-surgical treatment, and such as are common to us all who treat the diseases of women.

It goes without saying that none of us would intentionally expose our patients to any considerable danger unless the benefit to be expected would, under the risk involved, be inconsiderable or insignificant in comparison,—as in ovariectomy, for example,—and if we do so expose them it is because we fail to realize or recognize the danger. We all know, however, that numerous instances have occurred in which severe inflammation, involving the periuterine tissues, and in some cases pelvic abscess (so called), or pelvic peritonitis, causing great and long-lasting suffering, has resulted from curetting the endometrium, dilating the cervical canal, or even introducing a sound into the uterine cavity, applying a pessary, or repositing a displaced uterus.

It does not follow that these operations are to be condemned and discarded because of these occasional disasters, for we know that in a vast majority of cases much good and no ill effects will result from their proper application; but it must be recognized that we are in duty bound to learn under what conditions and for what reasons such serious consequences *ever* result, that we may avoid their repetition.

In any case having a history of previously existing pelvic inflammation, or so-called pelvic cellulitis, even though no present evidence of a pathological condition can be discovered, there is danger of rekindling the inflammation by any measure which creates traumatism,—as is liable to be the case with any of the operations mentioned. Still greater is the danger when gonorrhœal inflammation is present, even in the latent form, as it will often be for years after an acute attack. If in the cervical canal, the poison is liable to be carried into the uterine cavity on the instruments; while, if chronic or latent, this form of inflammation in the tubes and endometrium is easily excited into alarming activity. We should then endeavor to ascertain both by physical examination and searching inquiry if any of these difficulties have been experienced by a patient, and avoid the dangers rather than brave them. And even when evidence of danger is entirely wanting we should weigh well the possible dangers against the probable good to be accomplished, and in doing this many experienced gynecologists have come to *question*, at least, if the uterine sound and the pessary are not more productive of evil than good, while the dilator and curette are very liable to be misused by those whose surgery goes no farther than their occasional use.

Another source of danger which fortunately is less common than those we have mentioned, especially among homœopathic physicians, is the free, and, it seems to me, reckless introduction into the uterine cavity of caustic substances, such as chromic acid, sulphate of copper, nitrate of silver, etc.

While the uterus will doubtless bear more abuse than any other organ, these applications are frequently more than it can endure, and inflammatory troubles are created which extend to the fallopian tubes and periuterine tissues; and the wonder is, not that this does sometimes happen, but that it is not a common result of such treatment. This is a danger we can well afford to avoid by never inviting it.

One of the chief and most common sources of danger, and that to which more physicians expose their patients than any other, lies not in the active measures adopted by the gynæcologist, but in the neglect of these. We should all, I presume, agree that rash, reckless recourse to radical and dangerous measures is to be discouraged and condemned; but on the other hand, there can be no doubt that under some conditions conservatism is as deserving of condemnation, as it not only increases existing dangers but adds others even worse, *e.g.*, in many cases of ovarian tumor the course of treatment which has been advised before resorting to radical operative measures, even to repeated tapping of the cyst, has been productive of greatly increased danger to the patient, besides prolonging her suffering by postponing the only curative measure.

This is even more strikingly illustrated in many cases of pyo-salpinx or pelvic abscess. While conservatism is applying its futile efforts "before resorting to surgical treatment," the patient is suffering weeks of torture and decreasing the chances of successful operation; or if this is avoided, leaving her with chronic disease of the pelvic tissues, adhesions and dislocation of organs, and the constant menace of a repetition of the difficulty upon the least provocation. Pyæmia is also in some instances a result of this conservative treatment, as in a case now under my care, in which an old-school physician (I am thankful it was not one of our own school), who had for nine or ten weeks endeavored to cure a pelvic abscess without surgical aid, had seen the patient suffering agony and wasting away to a mere skeleton, and finally informed her that he could do no more for her, and that she had better go to the City Hospital. When I was called I found her suffering with chills, fever, and profuse night sweats, and entire loss of appetite and vomiting of all food taken into the stomach. The pelvis was filled with an immovable mass, but in the region of the left ovary and tube fluctuation could be discovered. Opening into

this through the posterior cul-de-sac, a teacupful or more of stinking pus was drawn off and the cavity washed out. It is needless to say that the chills, fever, sweats, and vomiting were speedily relieved, and that convalescence is now well established. But one other point must not be forgotten: In all cases of this kind, whatever the method of practice, opium will almost surely be resorted to during the intense suffering which characterizes this disease, and hundreds who have survived it have done so under the curse of the opium habit.

• In this disease we see, then, that the dangers even of a laparotomy for immediate and radical cure, are insignificant beside those of conservative treatment. I do not think this is fully realized by those who do not themselves operate upon such cases, and unless they do, they are always *inclined* to try all other means before calling in surgical aid; hence, this great danger is most generally encountered by the conservative practitioners, who question the necessity of many operative measures, and even decry them as meddling and vicious, and, still worse, deny the necessity for accurate diagnosis or physical examination. I would only ask of such that they investigate for themselves,—see with their own eyes the results of surgery,—and then I am sure they will not longer subject patients to the dangers of blind conservatism.

And now let us consider for a moment the dangers to the physician in gynæcological practice. Regard for the modesty of our patients, especially in private practice, and at the first examination in particular, naturally leads us to make a digital examination without exposure to sight, and in so doing many of us have introduced the finger into a vagina foul with syphilitic ulceration. A scratch, an abrasion of the skin, from any cause, even a hang-nail, might give admission to the poison, and infect one as surely, and generally more virulently, than when acquired in the usual manner. Numerous instances are on record of physicians

thus poisoned, and some whose lives have been wrecked and ruined thereby. Yet we cannot refuse to treat such cases, and we are not likely to know before examination what we have to deal with. Hence we cannot be too careful in the case of our hands and instruments, as by the latter we are in danger of conveying poison from one to another of our patients unless extreme care be taken, and for such an accident no physician could ever forgive himself.

With all possible care, however, we cannot ourselves avoid altogether the danger of infection which we incur to a much greater extent in gynæcological than in any other branch of practice.

Without taking more time by referring to other dangers, either to physician or patients, I think it will be conceded that we owe it to ourselves, and to those who confide in us, to know and recognize the dangers we have to meet, and knowing them to guard both ourselves and our patients carefully against them.

MEASLES CONTRACTED IN UTERO.

BY

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That maternal diseases affect the unborn child is conceded by all practitioners without question; but cases well defined and unmistakable are of especial value to those of us particularly interested in pædology. Therefore I report the following case:

Cora was admitted to the Mission Home on Thursday, pregnant, and with "incessant cough," which, however, I did not happen to hear. Saturday morning she presented a well-developed case of measles. Everything went on well with her, no serious or unusual symptoms, until

Tuesday morning, when labor set in and a seven months' child was born. It breathed very feebly for an hour, when life became extinct. As soon after death as the usual redness at birth had faded out a little, the entire body of the child was covered with an eruption very red and confluent, which remained very distinct until the child was buried.

I will just add that every one in the family who had not previously had measles, and one or two who supposed they had already had the disease,—twenty-one in all, ranging from thirty-five years to a month old,—developed a genuine and in some instances severe case. The only one who escaped was a baby, born during the epidemic—the second time we have had a similar experience of only one young babe escaping during the epidemic.

GENITAL TUBERCULOSIS.*

BY

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Invasion of the genital apparatus by tubercular bacilli is rare. Some regions, the vagina and the cervix, for example, appear very refractory, without doubt, on account of the resistance of the stratified pavement epithelium which protects them. The tubes are most often the point of the origin of the tubercular lesions. From the tubes the alterations are easily propagated to the ovaries and, more rarely, the uterus.

I shall present, as a whole, the picture of tuberculosis of the genital organs by adopting the anatomical order.

* Translated for the HOMŒOPATHIC JOURNAL OF OBSTETRICS by the Editor, from Pozzi's "Traité de Gynecologie."

Historical Sketch.—The principal works marking the first steps in this direction are those of Louis, Senn, Raynaud, and Cruveilhier. With Aran, Beruntz, and Brouardel especially, pathological anatomy, although still reduced to accord a preponderating importance to the microscopic appearance, takes greater precision, and the clinical description is already advanced (1858 to 1865). Since then the discovery of the tubercular follicle, and that of Koch's bacillus, has given us a criterion to guide our researches, at the same time that the advancing surgical skill permitted the study of fresh preparations. The names of Hegar, Wiedow, Cornil, and Terrillon are attached to the latest works on pathological anatomy and treatment.

In a pathogenetic point of view we may cite : Conheim, who was the first to advance the idea of a possible transmission by sexual relations ; Verneuil, who has defended this opinion vigorously, and has demonstrated the utility of comparing the inoculated woman with the inoculator, the method that has given such great progress in the etiology of syphilitic accidents ; Verchère, Fernet, and Derville, who have reported very probable facts of genital contagion ; Reclus, who has discussed them.

Etiology, Pathogeny.—Is there a primary tuberculosis? This fact is beyond doubt. Geil and Tomlinson, in working out the facts already indicated by Namias, Cristoforis, and Rokitansky,* have long ago cited numerous examples of isolated tuberculosis of the appendages. It is proper to state, however, that the observations preceding the specific determination of the tubercular follicle, and of the characteristic bacillus, do not have a decisive importance. But the most recent verifications have plainly confirmed this fact.

* Rokitansky, *Lehrbuch der pathol. Anat.*, Bd. III, p. 444, 1844 ; Lenhart (*Primäre Tuberculose der Tuben bei einer 67 jährigen Frau*) has cited a case of primary tuberculosis of the uterus with obliteration of the uterine orifice; Derville (*De l'infection tuberculeuse par la voir génitale chez la femme*) has reported numerous observations of primary tuberculosis, but some of them appear doubtful.

Primary tuberculosis of the male genital organs is also frequent. One of the most curious traits of this variety of local tuberculosis in both sexes is the possibility of its remaining a long time, or even indefinitely, latent or unrecognized in consequence of its perfect sequestration by false membranes and by the inspissation of pus. This is especially observed in the tubes, and it may then be impossible to find the bacilli, as they are, without doubt, destroyed in time, although the tubercular nature of the focus may be clearly demonstrated by the appearance of an acute miliary trouble, either pulmonary or meningeal. The history of old tubercular foci in the bones or articulations furnishes numerous analogous examples.

How is the tubercular bacillus carried to the female genital organs? Their easy communication with the exterior seems, *a priori*, to permit frequent infection, either by the atmosphere, by the introduction of infectious bodies, or by the ingestion of tubercular spermatic fluid.

This theory could only be admitted after the works of Villemin and Koch had overthrown the accepted ideas on the origin of tuberculosis. Even to-day, this theory of direct infection is not adopted without contest. It appears to have both defenders, who are so enthusiastic that they are disposed to accept numerous observations that are without sufficient demonstration, and systematic detractors. In fact, this mode of infection appears very probable, although it certainly constitutes the exception.

The frequency of this primary tuberculosis has been sought in comparison with secondary infection. Mosler has found eight primary cases out of forty-six observations. Frerichs gives the proportion of fifteen out of ninety-six, and Schram only of one out of thirty-four.

With regard to the agents of the infection of the patients in primary tuberculosis, it is easy to account for them if they have been in contact with those affected by this disease; the linen, a sound, the finger of a surgeon or mid-

wife may carry the germ. Cohabitation with a man affected by genital or pulmonary tuberculosis appears to be the avowed cause in numerous cases. Is it, then, from the spermatic fluid, from the saliva, or from the blood of an excoriation that the inoculation occurs? We cannot say precisely.

The puerperal state plays an incontestable part in the

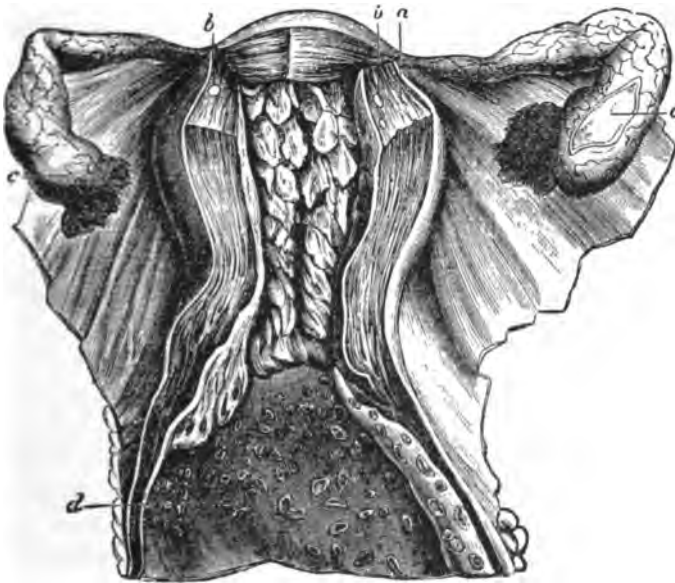


FIG. 1.—Tuberculosis of the Uterus, of the Vagina and of the Tubes (Barnes) ; *a, b*. Tubercular Masses of the Mucosa and of the Uterine Tissue ; *β*. Ulcerations of the Vagina ; *c*. Tubes transformed into Pyo-salpinx.

primary affection. This fact has been noted by all authors. The genital passage is, in fact, largely open then to the entrance of all morbid germs, and the obstetrical maneuvers may contribute to their introduction. It is also necessary to note that an infection of any nature whatever, septicæmic or blennorrhagic, predisposes to the tubercular infection. We know how the puerperal state predisposes to the first ; these may, then, so to speak, open the road for

the second. These facts are well known in general pathology under the term of mixed or combined infection.

Secondary tuberculosis, that is to say, developed in the course of a tubercular degeneration of another organ, and of the lungs in particular, is observed incomparably more often than the primary disease. Before affirming that we have only the latter, it is necessary to ascertain that there does not exist the least tubercular nodule in the apex of the lung, and the difficulties of such a diagnosis are well known.

This is truly the defective point in many of the observations, so-called demonstrative, that have been published. Another weak point has been a too ready admission of the tubercular nature of the small indurations of the epididymus or prostate found in the presumed authors of the infection.

The tuberculosis of the genital organs which follows in the course of phthisis comprehends two varieties in a pathological point of view. In the majority of these cases, without doubt, the genital tuberculosis is a secondary metastasis, according to the expression of Conheim, and the microbe has emigrated with the blood or the lymph from the primary to the secondary focus. But at other times there is contamination by a different mechanism approaching to that of the primary infection of non-tubercular individuals. The patient then infects her genitals through an external medium, which she herself has first infected. It is without doubt by the soiled linen, the diarrhœa, or the sputa, that the vagina is inoculated in advanced tuberculosis, with ulcerations of that organ.

Finally, tubercular inoculation extends from place to place by contact or by propagation, by way of the lymphatics, in cases where there exists intestinal tuberculosis which has attacked the pelvic ganglia. The bacilli of the peritoneum may, also, infect the pavilion of the tube. Pinner has shown that dust introduced into the peritoneum is rapidly carried into the tube and from there into the

uterus. The same should be true of germs, and, in fact, Jans, in a case of pulmonary and intestinal phthisis, has found numerous bacilli in the section of tubes still perfectly normal. Without doubt they came from the peritoneum, into which they had migrated from the intestine. Infection of the tube also occurs by adhesion of a loop of tubercular intestine, the same that a recto-vaginal tubercular fistula may succeed to a perforation of the septum in cases of ulceration of the large intestine.

The predilection of tubercular lesions for the tubes is explained by several considerations: Their mucosa, very



FIG. 2.—Bacilli of Tuberculosis ; A. Phthisical Sputum ; B. Pure Culture of Koch's Bacillus.

rich in folds, not subject to menstrual changes as that of the uterus, is admirably adapted to the retention of morbid germs that have been able to attain it. The intense vitality of the uterine mucosa, its partial desquamation at each menstrual period, is, without doubt, its principal defense against the bacilli. With regard to the vagina, it is protected by a thick stratified layer of its epithelium, and perhaps by the vital concurrence of the numerous germs to which it always offers shelter. We cannot, according to Verneuil, establish a comparison between the conditions of proliferation of the bacilli which is anærobic and develops by preference at a great depth, and those of other microbes which, like the

gonococcus, attack the first parts of the genital canal that they meet.

TUBERCULOSIS OF THE VULVA, OF THE VAGINA, AND OF THE CERVIX.—Tubercular ulceration of the vulva is quite an exceptional lesion. M. Zweigbaum, who has described an example, has only found two cases reported. His patient, aged thirty-two years, was phthisical and succumbed to intestinal and pulmonary tuberculosis. The author believes, however, that the genital lesion was primary. There were also ulcerations on the vagina and cervix uteri. Bacilli were found in abundance in a small section, excised during life from the vulvar ulceration.

Cases of tuberculous lesions of the vagina or of the vaginal portion of the cervix are rare. Daurios, however, has collected twenty-four, but it should be noted that they are not all beyond criticism.

The external appearance and certain presumptions drawn from varied circumstances are not sufficient to characterize such an alteration. However, there exist a number of incontestable facts. We can only mention miliary tubercles that are met in acute tuberculosis. It is also necessary to distinguish in a special article the primary or secondary tuberculization of certain fistulæ that connect the vagina with the neighboring organs.

I have only found a single case of isolated primary ulceration of the vagina,—one observed by Max Bierfreund. Usually this lesion coexists with primary alterations of the tubes or of the uterus. In a remarkable case, by Virchow, there was tuberculosis of the urinary passages and infection of the vagina from the urine. The rectum may also be the point of departure.

Tubercular ulceration of the vagina presents perpendicular, unequal, and anfractuous edges and a depressed, yellowish-gray base, covered with a caseous layer that is quite characteristic. Around the ulcer frequently exist yellow, opaque grains, similar to those which surround the lingual

tubercular ulceration, so well described by Trélat. Koch's bacillus, found at the surface of these ulcerations or in the vaginal secretions, leaves no doubt on the nature of the disease when it can be demonstrated, which is not always.

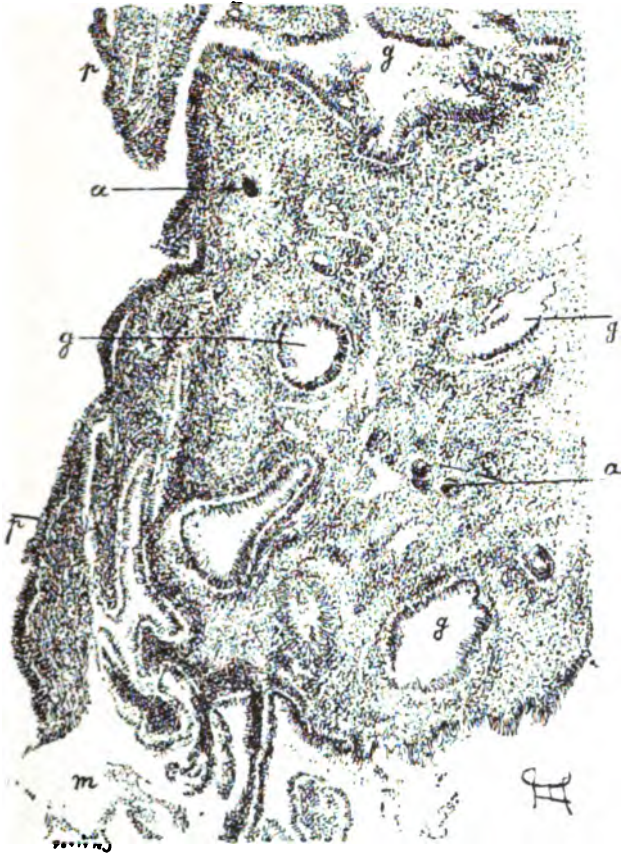


FIG. 3.—Tuberculosis of the Cervix. Section of the Mucosa of the Cervical Cavity (30 diameters); *m*. Mucus; *p*. Folds and Villi covered by Cylindrical Epithelium; *g.g.g.* Glands; *a.a.a.* Giant Cells (Cornil).

These tubercular ulcerations can be cured, temporarily, by simple means, such as painting with tincture of iodine, or with lactic acid, but recurrence is rapid; for, with a super-

ficial alteration of the cervix, there is found an invasion of the muscular layer by tubercular follicles.

Tubercular fistulæ of the vagina, according to Daurios, may be vesico-urethro, or recto-vaginal. They have no character that clearly distinguishes them from ordinary fistulæ occupying the same regions. The presence of the bacilli, or of the tubercular follicles around their orifice, alone permits diagnostication of their special nature.

Observations of tubercles limited to the cervix uteri are very few. However, one case is reported by A. Laboulene. Another has been described at length by Cornil; it merits citation as a remarkable type of this rare lesion. I shall borrow its description.

It relates to a case where Péan performed total hysterectomy. The clinical diagnosis of the lesion was doubtful. The aspect of the hypertrophied cervix, indurated, rough, with irregular vegetations, bathed in a thick, yellowish, clotted mucous liquid, caused fear of cancer, and on this hypothesis Péan removed the uterus. "Opening of the cervical cavity showed the cervical folds marked, vegetating, agglutinated by a tenacious mucus, and strewn with opaque bodies. Histological examination demonstrated tuberculosis of the cervix, limited to this part of the uterus." This case is extremely interesting on account of its rarity and the limitation of the tubercular processes. The preparations obtained by sections, after hardening in alcohol, perpendicular to the surface of the mucosa, show, with a low power (Fig. 3), the cervical folds presenting secondary villi and separated by depressions into which open the utricular or composite glands of the cervix. The surface of the mucosa as well as the depressions and the glandular cavities are filled with mucus. The glandular cavities are enlarged and at the same time the connective tissue is filled with small cells. In this connective tissue, at the surface of the mucosa, even at the summit of the folds, in the superficial layers as well as in the depths between the

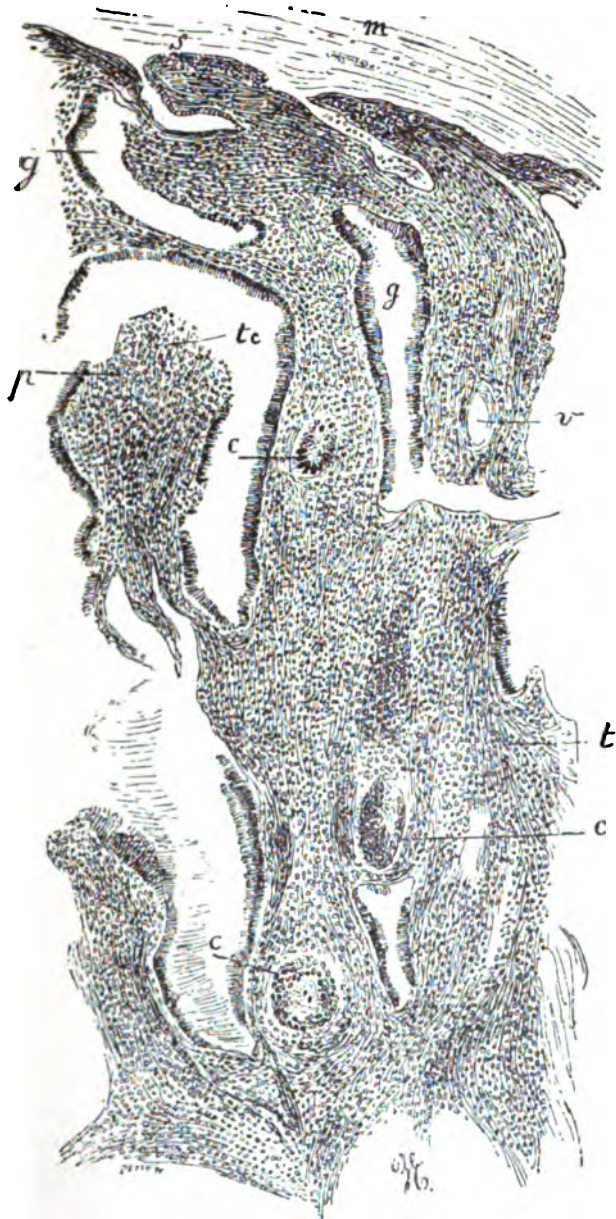


FIG. 4.—Same section as in the preceding figure (100 diameters); *m*. Mucus; *s*. Villi and Papilli; *g*. glands; *v*. vessels; *c.c.c.* Giant Cells; *p*. A Papilla with *t.c.* inflamed Connective Tissue.

glands, giant cells are distinguished, large enough to be seen in the slight enlargement.

The surface of the mucosa, the basis of its folds and villi, as well as the cavities of the glands, are lined with long cylindrical cells. With higher power there is seen (Figs. 4 and 5) between the glands, in the connective tissue of the mucosa, an infiltration of numerous small cells of giant cells, wholly characteristic, which appear to constitute in themselves alone all the tubercular lesion. It is true that the connective tissue which surrounds them is richer in round cells than in the normal state, but they belong rather to a physiological state. Besides, most often, around the giant cells there does not exist agglomerations of epitheloid cells nor an accumulation of cells in granular or necrotic degeneration. Thus it is that the tubercular follicles in this case were never visible to the naked eye.

The tubercular productions developed on the surface of the mucosa, covering the exterior of the cervix, that is to say in its vaginal portion, presented, in this preparation, the same appearance as the tubercles of the pharyngeal mucosa. Giant cells are seen in the midst of an accumulation of small cells. These granulations are covered, at their beginning and for a long time, by the normal layers of stratified pavement epithelium. Under the mucosa are found tubercular follicles in small number, situated in the midst of interlacing muscular fasciculi. These muscular fasciculi are, in a given point, separated by embryonal connective tissue, forming an islet, in the center of which there are one or several giant cells surrounded by epitheloid cells. These tubercular granulations are more voluminous than those of the surface of the mucosa. They offer there a disposition quite analogous to that observed in the muscular layers of the intestine or in the lingual muscle,—that is to say, that they are developed in the interfascicular connective tissue, pushing back by their extension the muscular fibers at their periphery. It is necessary then to expect, even when it is believed that

there is a slight tubercular eruption, superficial, of recent date, never having produced ulceration, nor loss of substance, that the deep tissue of the mucosa and even the muscular layer may be invaded by some tubercular granulations. These, in small number it is true, follow the track of the vessels in the inter-muscular connective tissue spaces.

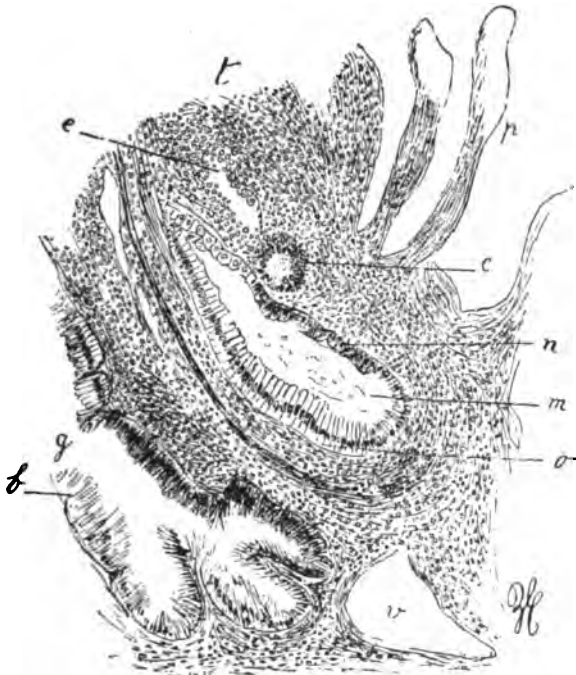


FIG. 5—Tuberculosis of the Cervix Uteri. Same section still more enlarged (150 diameters); *g*. Papillae and Vegetations; *t*. Connective Tissue; *e*. Fissure showing Epithelioid Cells belonging to a Tubercular Follicle; *c*. Giant Cell; *n*. Gland; *m*. Mucus; *b*. Epithelial Cells of the Gland; *v*. Vessels (Cornil).

When, even in tuberculosis of recent date, histological examination reveals such an extension of the disease in depth, we can draw the conclusion that it is not sufficient to attack the disease by superficial modifiers nor by curetting, and that total ablation will often be the only means of removing all the tubercular portions of the uterus.

Cornil sought in vain, in this characteristic case, for the bacilli of tuberculosis, but inoculation of animals produced tuberculosis.

Winter, on the contrary, found bacilli in the giant cells of a section of mucosa from the body of the uterus and of others from the cervix. This related to a tuberculous young woman, on whom Schöder, five years and a half before, had made a laparotomy, followed by the introduction of iodoform into the abdomen, for a tubercular peritonitis, with such success that the health was marvelously re-established. But, after a long respite, the tuberculosis became manifest in the lungs and in the genital apparatus. The tubes were attacked as well as the uterus.

Tubercular lesions induce about themselves and in all the mucosa a very marked degree of cervical endometritis. The inflammatory disturbances act both on the epithelial lining of the surface and of the glands and on the chorion.

In comparing the preceding description with that of the beginning of tuberculosis of the tube, that I shall give later, according to Cornil, it will be seen that between the lesions of the cervical cavity and those of the tubal mucosa there is a great analogy. There is the same situation of the giant cells at the summit of the folds and villi, or in the connective tissue of these folds. There are the same inflammatory phenomena, the same mucous secretions, and the same modifications of the epithelial cells.

It is quite possible that the tubercular inoculation may be made without an erosion or a solution of continuity of the cervical mucosa, by simple contact. That this has taken place in animals has been demonstrated by Cornil and Dobroklonsky. But these facts can only be applied to the human race with the greatest reserve.

The diagnosis of tubercular ulcerations of the vulva, of the vagina, or of the cervix, can only be made with some chance of certainty in cases where these lesions coexist with advanced pulmonary alterations. The discovery of

tubercular follicles, and especially of the bacilli in a fragment obtained by scraping or by excision, will alone be pathognomonic. In cases of primary genital lesions, there is great risk of confusion with some more frequent lesion.

The treatment should be palliative, if it relates to advanced phthisical subjects; energetic in the opposite case. Cauterization with the actual cautery and iodoform dressings for vaginal ulcerations are used. Fistulous tracts are to be largely excised. If the diagnosis is certain there should be no hesitation in performing hysterectomy even for a circumscribed ulcer of the cervix.

TUBERCULOSIS OF THE UTERUS. *Pathological Anatomy.*

—In the uterus, tuberculosis is almost always secondary. Three forms have been indicated, somewhat theoretically.

1. A rare, acute, miliary form, which offers no interest in a clinical point of view, and which is only an epiphenomenon in the course of a general infection of the economy with predominance of the general symptoms.

2. An interstitial form, of slow progress, essentially chronic, equally rare, of impossible diagnosis, but which may suddenly become manifest by a grave accident, such as uterine rupture, obstacle to delivery, etc., resulting from the alteration of the uterine tissue and from the obstruction to the physiological action of this organ by the interstitial tubercles.

3. An ulcerous form, which is the most frequent and the most important. In this last form the lesions, from the beginning, resemble those of endometritis, to which are added special nodules and giant cells containing bacilli. Later, the tubercular follicles become confluent; all the mucosa is infiltrated by a tissue formed of small cells. It presents, then, a total caseous degeneration. It is yellowish and opaque to the depth of one to two millimeters. Underneath, the muscular tunic is often hypertrophied. Neither at the surface of the mucosa, nor on section, can the naked eye distinguish tubercular granules recalling the classical description of

miliary tuberculosis of the serous membranes. The cavity of the uterus is sometimes filled by a thick magma. It may be transformed into a pocket of pus by the occlusion of the cervix.

The lesion is usually limited above the superior portion

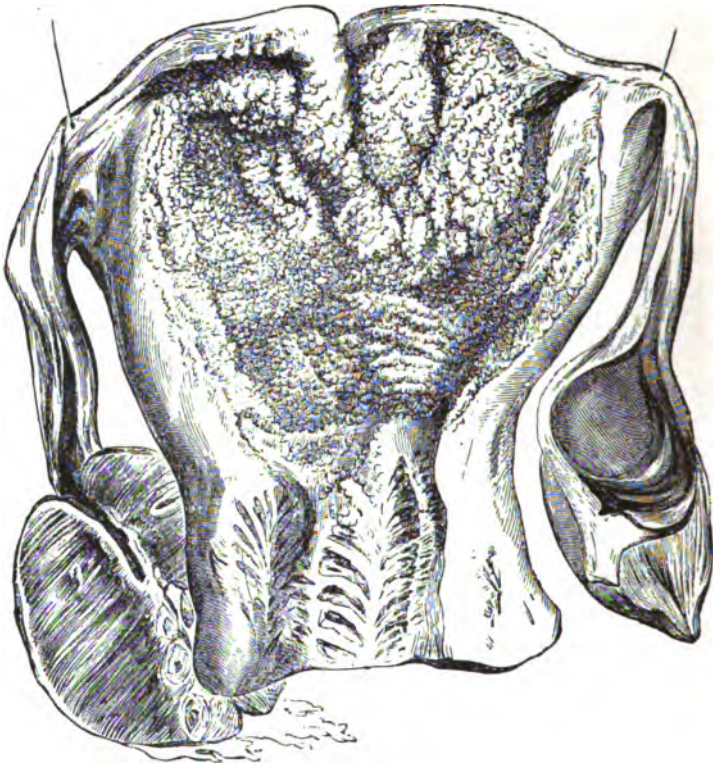


FIG. 6.—Tuberculosis of the Uterus and Tubes (Barnes).

of the cervix, which remains intact. The limit may be marked by an ulceration, with as sharply defined edges as if cut with a punch. According to Cornil, the alterations revealed by microscopical examination are as follows :

“Sections perpendicular to the surface of the corporeal mucosa, after hardening in alcohol, show no vestige of its

normal structure, no epithelium, no glands, no recognizable vessels. All the caseous portion of the surface presents to the microscope a homogeneous layer, formed of small necrosed cells, vitreous, no longer stained, with nuclei tinted in rose color by the picro-carmin. The cells are separated by fine fibrillæ, interlacing in every direction. Above the necrosed layer, there is a zone possessing small living cells, and between them, here and there, some giant cells. Then, coming to the muscular wall, there are also seen some tubercular follicles. In sections, comprising all the

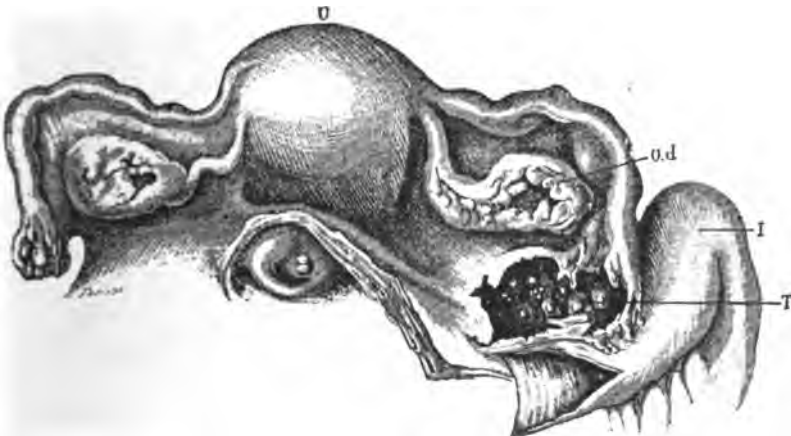


FIG. 7.—Primary Tuberculosis of the Tubes and Ovaries; U. Uterus; O.D. Right Ovary; T. Tubes dilated and adherent to a Tubercular Pelvic Abscess limited by the Ilium (Kotschan).

wall, with the peritoneum, there are, internally, the caseous infiltration replacing the mucosa, some tubercular follicles in the muscular wall, and granulations situated in the peritoneum." Cornil sought in vain for the tubercular bacilli in a dozen sections of the degenerated mucosa.

The caseous infiltration, accompanied by a superficial necrosis, the detached products of which constitute the caseous, curdy pus that fills the uterine cavity, is the most characteristic type of this chronic tuberculosis. Cornil compares this lesion to that of the same nature often found in the renal pelvis, the calices, and the ureters. "This

similitude is obvious. It relates, in the body of the uterus as in the urinary passages, to a yellowish-white thickening, opaque, with induration of the mucosa, which is wholly

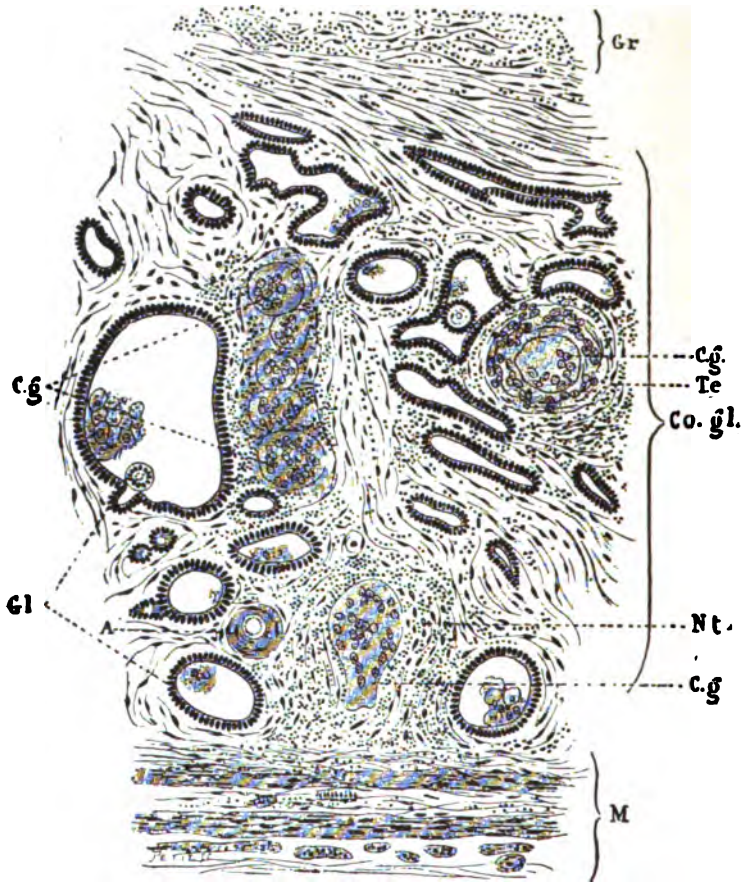


FIG. 8.—Tuberculosis of the Tubes. Section of the wall of a Pyo-salpinx (150 diameters) : M. Muscular Layer ; Co. gl. Glandular Layer ; Cg. Giant Cells ; Nt. Tubercular Nodules ; A. Arteriole ; Gr. Internal Layer of Granulations (Munster and Ortman).

necrosed. The surface of this is inlaid with a molecular fragmentation, with particles mixed with pus, giving it a grumous appearance. The microscope gives quite the

same appearance. The caseous surface presents a homogeneous aspect, a uniform infiltration with cells, without distinct tubercular islets.

"It is with difficulty, in the deep layer, still living, that giant cells can be recognized here and there. From this it results that we can say, of the pathological anatomy of tuberculization of the tubes and uterus, that there is not usually found, whether in the chronic state or the recent, tubercular granulations, evident to the naked eye or to the microscope, that respond to the classic descriptions of tubercles. In fact, granulations of the serous membranes have been taken as the type, and this type is only rarely met in the genital mucosa."

The rarity of bacilli in uterine tuberculosis is not astonish-



FIG. 9.—Giant Cells in Genital Tuberculosis (340 diameters).

ing. It is certain that they exist, but, as in the majority of local tuberculoses (tuberculosis of the testicle, lupus, etc.), they are in very small number, probably because of the long existence of the lesion. E. Doyen has recently found them in the autopsy of a young woman who died of typhoid fever. She also presented tubercles of the uterine mucosa and muscular tissue.

The symptoms, in the beginning, are those of an ordinary metritis with a more pronounced augmentation of volume. Thus this affection, which is perhaps more frequent than is supposed, may pass unrecognized. The caseous nature of the secretions and the coexistence of lesions of the tubes and of the lungs call for search for the granulations and the

bacilli which are alone characteristic. However, the histological diagnosis presents great difficulties. It is not necessary to wait until there are found in the uterine mucosa the tubercular follicles that are met in the serous membranes. It may be that the elementary granulation of Virchow will be the only constant lesion, and this is difficult to differentiate from a stroma already so rich in identical elements. Finally, the giant cell, which may be met, according to some authors, in interstitial endometritis, cannot sharply mark the diagnosis. However, according to Paul Petit, we can determine the tubercular nature of an endometritis with an almost absolute certainty, if the examination of the *débris* furnished by curetting affords the following characters: interstitial cells, necrosed or atrophied in a diffuse manner, or in series; giant cells, more or less numerous; embryonal nodules detaching from the stroma and appearing developed around the vessels; numerous glands, dilated, lined by epithelial elements, considerably elongated, or that have undergone epithelial elements. To this end an exploratory curetting should be made to avoid confusion with cancer of the body of the uterus.

Treatment.—If the state of the lungs permits a radical treatment, vaginal hysterectomy should be made in place of waiting for an insufficient treatment with the curette. If the uterus is too large and the tubes are suspected, there should be no hesitation in removing these organs by laparotomy. If the cervix be intact, supra-vaginal hysterectomy can be made; if it be affected total hysterectomy must be performed.

OVARIES AND TUBES. *Pathological Anatomy.*—The ovary is rarely attacked alone. Some cases have been cited by Klob and Spencer Wells. Lesions of the tubes are, on the contrary, more frequent. Perrillon has seen these lesions exist simultaneously in the tube and in the ovary three times out of six.

In the majority of cases of tubal lesions, tubercular

endometritis is observed, and is then, without doubt, the primary source of infection. With the naked eye there are observed lesions which recall those of suppurative salpingitis, with or without dilatation. The pyo-salpinx may be considerable, and even have a capacity of two liters. Adhesion and diffusion toward the contiguous parts transform it into pelvic abscess (Fig. 7). Though the lesion may be recent it early reacts on the peritoneum and induces false membranes and the encysted serous effusions of peri-metro-salpingitis. Fernet has even noted progressive invasion of the pleuræ and the production of subacute peritoneo-pleural tuberculosis arising from a primary lesion of the genital organs. This invasion occurs by way of the lymphatics, that Hegar has seen injected with caseous material. The lymphatic communication of the pleura with the peritoneum, through the diaphragm, explains this infection. The mesenteric glands are often degenerated.

Tuberculosis of the tube, developed primarily or consecutive to the appearance of granulations in the contiguous peritoneum, are recognized with the naked eye by the increase in the size of the organ, by the semi-transparent or yellow granulations which exist on its surface or in the muscular wall, and by its contents. After opening the tube longitudinally, we recognize that it is dilated, that the thick wall contains tubercular islets often visible to the naked eye, and that it is filled with a more or less thick, puriform, grumous, caseous fluid, characters like those of tuberculosis of the body of the uterus (Fig. 8).

Transverse sections obtained after hardening in alcohol show a thickening of the wall and of hypertrophied, ramified vegetations. In the depth and at the internal surface of these vegetations and villi, there are often found giant cells with multiple ovoid nuclei and sometimes crystalline concretions (Fig. 9). The free surface of the folds and villi is almost always covered by cylindrical cells with cilia. In places these epithelial cells are modified by

mucous and granular transformation, or they are desquamated and free in the mucus, with some globules of pus. Staining the sections in the search for bacilli does not always reveal them. Besides the giant cells and the small tubercular follicles developed in the vegetations, larger follicles containing giant cells are found in the fibro-muscular wall. In the case of alterations of longer standing there is seen, in sections of the purulent sac formed by the tube, a layer of embryonal tissue at the inner surface. Under this internal layer there is a fibrous tissue strewn with quite clear tubercular follicles, many of which contain multinuclear giant cells. The wall of the tube is infiltrated by small cells and also offers some tubercular follicles. In the layer of fibrous tissue, between the wall and the embryonal layer, there are seen inclusions of epithelium, proceeding from the epithelial cells of mucous coat. These inclusions present the form of tubular glands. At their periphery are observed cylindrical cells, regularly disposed in rows. In the central part of the inclusion, there exist rounded or ovoid cells, pale, stained yellow by picro-carmin, but without visible nuclei. This is a mass of necrotic cells becoming mucoid, agglutinated one to the other (Cornil). This lesion has been called necrosis by coagulation. Koch's bacilli have been sought in vain in some cases of salpingitis that are certainly tubercular. They have been found, however, though in small quantity, by Orthmann, Werth, etc.

The symptoms are the same as those of a non-tubercular salpingitis, and one must make in most cases a diagnosis of probability by the exclusion of all other causes, by taking into account the hereditary antecedents and the manifestations which may exist in the lungs. The nodular disposition of the tumor and the frequency of acute attacks of pelvi-peritonitis have been given as characteristic. But they are not specially characteristic, as they are met in all the varieties of pyo-salpinx.

As to treatment, it is necessary to distinguish two distinct

conditions, according as there exists a pulmonary tuberculosis or not. If the lungs are healthy, complete extirpation of both tubes and both ovaries is attempted by laparotomy. If the woman is phthisical we are limited to palliatives. Of these will be the opening of the focus through the abdomen, or through the vagina, and careful disinfection by the aid of *tamponnement* with iodoform gauze.

If the pulmonary lesions are of little intensity, the surgeon should be guided by considerations analogous to those which would guide him in the treatment of any other focus of local tuberculosis.

Hegar counsels intervention in primary tuberculosis as soon as the diagnosis has been made. In secondary tuberculosis intervention is necessary if, the condition of the lungs remaining stationary, the genital lesion has a tendency to aggravation. Peritoneal tuberculosis is not a contra-indication. Laparotomy has been very successful in such cases.

ARRESTED DEVELOPMENT OF THE UTERUS AND ITS APPENDAGES.—INFANTILE UTERUS.

BY

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Arrested development of the uterus and its appendages has for many years been recognized as a pathological fact, but not until quite recently has the importance of this condition in the etiology of the diseases of women, especially those diseases that belong to the period of ovarian activity, been appreciated; as a cause of disturbances of the reproductive organs, an undeveloped uterus, in an adult woman, has been almost ignored. Even when the condition was

diagnosed, it was given little place in the etiology of the menstrual derangements for which relief was sought. But it is more than probable that frequently no such diagnosis has been made; that the undeveloped uterus has been confounded with a displacement or with an imperfectly open cervix; and that treatment has been directed to these fancied conditions, it need not be said, with very indifferent success.

With our present clinical knowledge of the infantile uterus, there is little doubt that we are right in regarding this as a cause of some of the neurotic troubles of developing life; of menstrual derangements, and, above all, of sterility. Of course it will be understood that in making this statement I assume that an undeveloped uterus has been found to co-exist with the neurotic, menstrual, and reproductive conditions mentioned.

And here I would urge the necessity of examination, when the symptoms point to the reproductive organs as a center of derangement. However skillful a surgeon may be he can do no more than surmise such and such to be the condition of his patient's pelvis before he has examined the organs in question. I need not say that in this as in everything else in surgery, the surgeon must be guided by his own judgment, for no one can condemn more earnestly than I do the routine practice of examining every woman who chances to have a pain in her abdomen. No woman submits to an examination without a struggle, and no woman should be subjected to the ordeal unless necessary; but when necessary there should be no hesitation. A word further regarding the examination itself. In the first place the more one becomes accustomed to the use of his fingers, that is to say, the more he educates his fingers and learns to place his eyes and brain in his finger's end, the less will he use a speculum.

A second point in the examination is rapidity of diagnosis. In no class of diseases do I believe this to be as valu-

able as in those which necessitate a vaginal examination. Of course this faculty is acquired by, and goes hand-in-hand with experience, but one may safely say that what cannot be diagnosed in two minutes will not be diagnosed in ten.

To return to the infantile uterus. To appreciate the etiological significance of this form of arrested development it is necessary to study the function and functional activity of the uterus and its appendages, but before doing so let us look at its clinical history. And here we have two classes to study: Those in which the symptoms develop shortly after puberty—let us say before the eighteenth year—and those in which there is little evidence of anything wrong until after this period, or until after marriage, when painful menstruation and failure to bear children brings the patient to the surgeon for treatment.

In the first class are young, generally well-developed girls, who have begun to menstruate rather late, at about sixteen years of age. The period is marked with excessive pains, usually greater during the first twelve hours, though sometimes felt before the flow sets in, then pointing to tubal complication. The period is short—two or three days at the most—and the flow scanty. An examination shows the uterus to be in perfect position, but only a little hard body, composed principally of the cervix, thus establishing retention of the foetal or the infantile form. This set of symptoms may not develop until menstruation has become fully established, and then, month by month, make their appearance, or they may coexist with the establishment of puberty. There may be, and generally is, a marked neurotic condition, which becomes particularly well pronounced during menstruation. In these cases there is absolutely nothing abnormal but the retained infantile type of uterus, and upon clinical, and, I believe, upon physiological grounds as well, we have reason to refer the derangement to this absence of development.

In the second class of cases of infantile uterus belong

women who have menstruated with more or less difficulty for three or four years, but the suffering has not been sufficient for them to seek relief. The period, however, gradually becomes more and more painful, and less and less profuse, though probably it has always been rather scanty. These are the women who are advised to marry—a most iniquitous advice from any standpoint—as a means of cure. The advice is taken, and their condition is in nine cases out of ten made worse by married life, for not only is increased work thereby thrown upon an organ already overburdened, but there is the added grief of not bearing children. Not every case of undeveloped uterus belonging to this class marries, but many of them do, whether from advice or inclination.

As a rule they are in other respects well-developed women, giving no evidence, either in general appearance or in the formation of other organs, of the infantile size of the uterus. I saw a case in marked illustration of this very recently. A handsome, well-developed lady was sent to me to ascertain the cause of sterility and to be relieved of painful menstruation. Her history showed that until nineteen years of age her periods had been comparatively comfortable. They then began to be more and more painful. She married at twenty years of age, and between that time and the one at which I saw her,—four years,—had not been pregnant. Since marriage her menstruation had been increasing in painfulness until it had become almost unbearable. Upon examination I found every organ perfectly developed with the exception of the uterus, but this was not larger than that of a child five years old. This case is one of several that might be taken from my case book to illustrate the second class of infantile uterus, and when speaking of the treatment of this condition,—it cannot be called a disease,—I will again refer to it, and mention as well some cases that belong to the first class.

In these cases—the second class—until the demands upon

the uterus, which increase with maturity and married life, becomes that of the fully developed woman, it is able,—after a fashion,—to perform its function, but its growth is arrested, and it then becomes a small horse struggling with a large cart. These cases do not generally mark the most undeveloped form of uterus.

There is yet a third class of infantile uterus, but this does not belong to the undeveloped type. It occurs in women who have borne, usually, a single child, and is the result of super-involution following parturition. Simpson mentions a remarkable case, in which the entire reproductive organs returned to the condition they were in before puberty; this was accompanied with amenorrhœa. It is not unlikely that super-involution is of more frequent occurrence than is generally believed, and that a certain proportion of the cases of sterility following a single parturition would, if examined, prove to be instances of infantile uterus.

Now let us see what the uterus is, and what its function, and we will be better able to reach some conclusion as to why its arrested development should cause such a degree of disturbance as we are able to trace to this cause.

In the light of modern investigation, we may regard the uterus as a placenta-forming organ, and looking upon the maternal portion of the human placenta as a chief factor in the nourishment of the embryo, we may go so far as to believe that this is the sole function of the uterus, and to its perfect performance all else in the uterine economy is designed to contribute. This position is further strengthened by the fact, that, given a proper placental attachment, any part of the abdominal cavity may serve the bearing function of the womb.

Without discussing in detail the physiology of placental development in the human female,—and it will be understood that we refer only to the human species,—it will be sufficient for our purpose to note the enormous glandular development that takes place during this process; a glandu-

lar development which in rapidity and extent has no parallel in the economy. There is little reason to doubt that this process of gland development, or as we may more conveniently call it placental development, recurs at each menstruation, and, when unaccompanied with conception is a futile effort on the part of the female at reproduction. Why this should recur periodically, or when the uterus is not stimulated to action by a fertilized ovum, remains a matter for speculation. Nor are we any better able to find a satisfactory explanation for the loss of blood that occurs at the menstrual period, and that apparently bears a relation to some part of the effort at placental formation. My own opinion is that it really has very little to do with the glandular development that takes place at that time, but that it follows throwing off of the decidua, a probable attempt at the formation of the *decidua serotina* of the pregnant uterus, and physiologically may serve the purpose of relieving the congestion and determination of blood which accompanies the rapid development of gland tissue.

Such being the function of the uterus, we have little difficulty in understanding why its inability to perform that function should be the source of derangement of the entire reproductive system. Menstruation, meaning the entire process and not the flow of blood only, thus becomes an attempt on the part of the uterus to do a work that it is not fitted, either in size or structure, to execute; a work that it is incited to perform not by the ovaries alone, though these have a very important part in the process, but by the entire female organism, which tends in every part toward reproduction. The forces of this unconscious stimulus, a stimulus that belongs to adult life, are focused upon the uterus, and this organ, being only that of an undeveloped child, is entirely unable to respond to the demand made upon it. Hence the nervous disturbance, the physical suffering, and of course the sterility.

Menstruation and the infantile uterus is but another

illustration of what we so frequently find in other parts of the economy. An over-worked organ,—an organ utterly unable to perform the function laid upon it. But between this defect and that of many other parts there is this vital difference. With others, the function can be arrested. The brain can stop work, the stomach can have its work done, but the uterus is under the control of influences more subtle and less easy to arrest.

The interesting question is here raised: Do the ovaries and tubes always retain the same undeveloped form as the uterus, or do they represent a different stage of arrested development. The evidence upon this point, derived from operative or post-mortem sources, is at present too meager to speak with definiteness, but, whatever the rule may be, there is certainly reason to believe that in some cases the appendages attain their normal growth and development. We may reasonably conclude that such instances mark the severer forms of the infantile uterus, those cases in which the suffering at menstruation becomes extreme, and increases as development progresses. That the ovaries ever retain the infantile form that the uterus presents, in those cases which show any evidence of mature function, I see no reason for believing, for there is no more evidence that the infantile ovaries are active and able to perform their function, than that the uterus of a corresponding period of life is capable of developing a placenta. I think, therefore, that we may conclude, in the absence of positive assurance to the contrary, that in infantile uterus, we have a uterus that retains a very early stage of development, but that the appendages have not been arrested at a corresponding stage of development.

In seeking for the cause of infantile uterus, it must be confessed that our efforts have thus far been without satisfactory results. But it is probable that a series of causes combine to bring about this arrest of development, and that the causes vary, for example in the cases that we have

placed in class one, from those which conduce to develop the cases in the third class.

That all the cases of infantile uterus that can be traced to congenital defect belong to the general class of infantile paralysis, there is reason to believe, and as the more usual forms of infantile paralysis commonly follow upon some acute febrile disease, as inflammatory rheumatism, or one of the exanthematic diseases, so I would believe that infantile uterus may have such an origin. Why the paralysis should attack the uterus and prevent its development, of course receives no explanation, but we can as soon tell why an arm or a leg should become paralyzed. Upon the hypothesis of nutrition, it is conceivable that the acute disease occurred at a critical period in the development of the uterus; that organ, not receiving the necessary pabulum, was arrested in development, and thereafter retained the form and degree of development it had attained at the time it was arrested. But of course this is purely speculative.

The same causes which induce the first class, may be powerful to arrest development in the second class of cases of infantile uterus. It here becomes more a question of difference in degree than in kind. The uterus may be developed sufficiently to perform the menstrual or placental function during the first few years following puberty, but wholly unable to meet the demands of more mature life. In consequence, the undeveloped state of the uterus is not suspected until after menstruation has become fully established.

In the third class, that of super-involution, the cause undoubtedly lies in some accident of gestation, but more probably of parturition. Thus far the cases that have been studied are so few that we can only speculate as to their cause, and apply whatever theory of involution we may favor to this acquired form of infantile uterus.

I am not aware that any treatment of infantile uterus thus far adopted, which has for its object the growth and

development of the organ, has met with the least degree of success. It is as true of the uterus as of any other organ, that when arrested in its development there is no treatment with which we are familiar that is capable of producing any change in its condition. Electricity, dilating the cervical canal, various methods of local irritation, not to speak of numerous drugs, have all been tried and discarded. There is but one thing that can be done in these cases that offers a certainty of cure, and that is to remove the appendages. Of course this treatment would not be resorted to as long as there was a prospect of obtaining relief by other means, or unless the suffering was becoming so great as to undermine the general health. Under these circumstances I can find no reason for withholding from the patient the only certain means of relief. The women are absolutely sterile, and until the menopause they are condemned to almost constant suffering. With our present really insignificant mortality following removal of the appendages, the risk is very slight from the operation, and the majority of women will gladly assume that risk for the relief that it offers.

42 WEST FORTY-EIGHTH STREET.

PUBERTY IN THE FEMALE.*

BY

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Puberty is the first important epoch in the sexual life of woman. It consists essentially in the development and ripening of the ova, and their escape from the ovaries through their prescribed channels to the interior of the

* Read before the Boston Gynæcological Club.

uterus. During the childhood of the boy and the girl no marked sexual distinctions obtain. In general they are identical. Their looks, habits, and tastes are similar. They thrive upon the same nourishment, live in the same room, join in the same studies; are full of sympathetic relations; but void of the passions and propensities of subsequent years. Disease claims both alike for its prey, and love and affection are bestowed on both the same. During this age both join in athletic exercise with almost equal success, while mental development is marked by no perceptible difference. As the girl arrives at the tenth or twelfth year, a notable change begins to take place. Now the delicate tinge of softness and sensitiveness, which so slightly distinguished the girl from the boy previous to this time, begins to be more marked. She becomes more timid and reserved, more confiding and tender-hearted. And finally, at the age of from thirteen to fifteen years, she takes on more fully the characteristics of woman, which continue to become more perfect until the function of ovulation is fully established.

Puberty is also attended by a rapid development of the sexual organs. For hitherto there has been but little change in these parts since the period of infancy; and their special function was dormant.

There is usually a rapid growth of the whole body at the same time; especially an increased deposit of fat in the cellular tissues of the breasts and lower extremities, which promotes the beauty and elegance of the female figure. At this time the pubic region becomes clothed with a growth of hair, which is followed later by a similar embellishment in the axillæ. The perfection and descent of the ova into the uterine cavity, which normally takes place once every twenty-eight days, is usually attended with a sanguinous discharge, which continues from three to five days. This function continues for a period of about thirty years in a regular manner, unless interrupted by pregnancy, lactation, or some abnormal cause. The mammæ are in readiness to

meet the demands of the offspring whenever the necessity requires. The state of puberty is usually preceded for a time by certain disturbances due to an increased flow of blood to the sexual organs, and also to an exalted sensitiveness of the nerves of said organs.

Among these uncomfortable sensations are headache, general lassitude, what is called nervousness, irritability of temper, being easily provoked to laughter or crying, vicarious hæmorrhage as from the nose, lungs, stomach, etc. Indigestion, attended with constipation, palpitation of the heart, hysteria, epilepsy, and even insanity, may be, and some of them are often, concomitant symptoms. Puberty takes place as a rule at the age of from thirteen to fifteen years in temperate climates. Variations of time take place with those girls who live in warmer or colder climates. It is said that this is a favorable time for the development of any constitutional disease to which the individual may have special proclivity.

Manner of life, as, for example, constant excitement of society, rich and stimulating foods and drinks, have a tendency to hasten the period of puberty; while constant labor, hardship, and deprivation have a tendency to retard it.

Dr. Southwick, in his work on "Practical Gynæcology," says the average age of the appearance of the menstrual discharge is fourteen years and two months; and of its duration, four days and a half.

The researches of Thomas More Madden, in the British Isles, have resulted in the following table of 495 cases:

Under twelve years						4	menstruated for the first time.		
At	"	"	17	"	"	"	"	"	"
"	thirteen	"	50	"	"	"	"	"	"
"	fourteen	"	94	"	"	"	"	"	"
"	fifteen	"	138	"	"	"	"	"	"
"	sixteen	"	105	"	"	"	"	"	"
"	seventeen	"	63	"	"	"	"	"	"
"	eighteen	"	10	"	"	"	"	"	"
Over	"	"	14	"	"	"	"	"	"

Instances of abnormally early advent of puberty are recorded. In the *Med. Chir. Treas.*, vol. xi., Dr. Martin Wall reported a case that menstruated at nine months. The case had the usual appearance of precocious maturity, except size, physiognomy, and intelligence. The mammæ began to enlarge at the age of eighteen months.

Sir Astley Cooper reported a case in the fourth volume of the same journal, that menstruated at three years of age. This case, at four and one half years, had the breasts as well developed as a woman of twenty years, and was very broad in the chest and loins. At six years she was 4 feet 1 inch in height, menstruated every three weeks, and had hair in the axillæ. A sister, then aged seventeen, had not yet menstruated.

Dr. Cookson has a case in *Med. and Phys. Jour.*, vol. xxv., that menstruated at three and a half years. In the *Medical Gazette*, 1832, Dr. Ledsean, reports a case at three years. In the same journal, of 1840, Dr. Peacock reports a case at nearly five years. Taylor's Medical Jurisprudence refers to a case by Mr. Whitmore which began at only a few days of age. Mr. Embling, in the *Lancet*, 1848, reports a case at two years.

There are also anomalies where women of advanced age have never menstruated. I knew a lady in my practice, who died at the age of seventy-eight years, and never menstruated. Another woman who is now about forty has never menstruated. She suffers from pain similar to that of menstruation at somewhat irregular intervals. Her face is covered with a beard as heavy as is usual for a man. She is very retiring and shy, and never appears in society. She is well developed, and possesses a fine intellect; enjoys reading, and is well informed.

As the puberal age makes a new demand on the nervous energy and supply of blood, to sustain the new functions of organs hitherto remaining in quiescence, it seems necessary that the working organs of the body should be in as

perfect condition as possible, and that the food should be of a good quality, and presented and taken into the stomach in the form and manner that will best serve its purpose. As in case of a manufactory, the propelling power of which is steam, when for some time a certain amount of machinery is in easy and successful operation, producing goods of a desirable quality,—now if other machines be added to the establishment, it at once becomes necessary, in order to run the now enlarged plant, that more steam be generated; and to see at the same time that the boilers are in proper condition, and that the engine is in good order and sufficient to supply the increased power demanded. Now in order to secure the highest degree of physiological action in the young girl at this time, it is necessary that her parents see to it that her mind be placed well at ease; that she has a well regulated code of habits; that a proper amount of good food be furnished her, which should be eaten at regular periods, while it is slowly and sufficiently masticated. She should not be called on to perform mental or physical labor beyond a moderate limit. Her exercise should be taken regularly, and within the limits of her physical strength. The mental faculties should also be systematically developed, and never pressed beyond the degree of weariness. The high pressure in our public schools is totally adverse to her comfort and health. It is important that she obtains sufficient sleep in a large and properly ventilated room. She should not be crowded into a small room with other children. It is necessary that the purity of the air of the sleeping room is preserved throughout the sleeping hours. It is not proper for her to remain up late at night. Exercise should be taken regularly out of door. Gymnastics carefully conducted are profitable. As a beverage, pure spring water is preferable to all other drinks. A daily bath in water of a comfortable temperature is desirable, and in my opinion (if properly taken) of high importance.

I believe the exercise of running, in which girls under the age of ten or twelve years usually equal if not excel the opposite sex, should be continued through the puberal age up to the period of womanhood. I think it an exercise well calculated to confer ease and grace to the movements of the body. Horseback riding, skating, and swinging (in my opinion) should be avoided during the puberal age.

Dancing, when directed by a competent teacher, is allowable, and at the same time gives ease and elegance to the movements and carriage, and accomplishment to the manners. The dress is not altogether unimportant. It should be so arranged as to admit of perfect ease and freedom of motion, and at the same time of the proper texture and weight to preserve an equal temperature of the body. All constrictions of the body such as corsets, tight bands, and elastics should be avoided. The shoes should be of proper material to accommodate the necessities of the season, and of such size and shape as will permit perfect freedom of motion and ease of the feet. To this matter I have referred more fully in another paper read before this club.

The education of girls pertaining to the matter of menstruation and the special function of their reproductive organs is too much neglected.

The anatomy and physiology of the genital organs, in my opinion, should be carefully taught them before they reach the puberal age, by their female teachers. And this should be considered of as much importance in their education as mathematics, or language. This could be conducted in a manner that would not detract from their modesty or deprave the purity of their sex.

Nothing is of greater importance than for us to know ourselves, and thus the better to be enabled to avoid the dangers that beset our way in the journey of life.

AN OLD ANTISEPTIC.*

BY

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CASE I.—On the 15th of October, 1889, Jos. B., laborer, aged twenty-six, in good health, caught his arm at the elbow, between the advancing ends of the boards and the bed roller in the frame of a large gang-saw in the lumber mill. Before the machinery could be stopped, the arm was nearly torn off. The flesh was torn to the bone for about two thirds the circumference; beginning at the outer border, extending over the inner angle of the elbow to near the point of the olecranon beneath. The wound was so jagged that only a couple of stitches could be taken at the outer border.

Taken altogether, it was about as ragged a wound as one would care to meet. In dressing, the arm, after being thoroughly washed with plain tepid water, was bent at a right angle, and thus the tissues fairly apposed. The whole wound was then covered with a thick layer of dripping wet, fine-cut plain tobacco. A light bandage held the dressing in place, the arm was placed in a sling, and the patient told to wet it as often as might be necessary to keep it constantly moist.

The morning of the second day the wound was thoroughly washed in tepid water, and, as the dressing clung to the raw spots on the surface, a thin piece of dripping muslin was laid over the line of the wound before the tobacco was applied.

The following state was noted at the same time: The

*Read before the Homœopathic Medical Society, State of New York, February 10, 1890.

arm was wholly free from swelling, circulation had been established in all the torn and bruised points along the edge of the wound, and only a very light rose-colored line marked the edge of the torn tissues. But little pain had been felt in the arm after a half-hour subsequent to the dressing. The patient had slept fairly well without a hypnotic.

The wound healed by first intention along the entire length. The superficial raw places soon closed over, and with one dressing a day after the first day, the patient was discharged on the twelfth day.

Not a single point of sloughing tissue was detected, and the wound was, from first to last, wholly free from the odor of suppuration. At no time did the biceps of this arm measure more than an inch greater than the other arm.

At the beginning of the fifth week from the injury the man went into the woods to chop cord-wood, and continued at this work all winter.

CASE II.—Caleb W., aged sixty-four, while working a heavy upright drill in an iron-bridge shop, caught the tips of his fingers in the clogs. The second finger was lost at the level of the root of the nail; and the third lost the nail, which was torn out by the roots, and also the whole end torn off, leaving the tip of the last phalanx protruding from the wound.

Being desirous not to shorten the fingers, I decided not to remove any more, but allow the ends to heal by granulation. After thorough washing in tepid water, a soft piece of thin old muslin was laid over the wounds, and a cap of dripping wet plain chewing tobacco applied. After fifteen or twenty minutes, all pain had ceased, and from thence none was experienced until the wounds were healed.

In this case there was no swelling of the fingers, no enlargement one half inch below the wound, and not a trace of puffiness of the back of the hand; nor was there at any time any formation of pus, nor any of the odor of suppuration.

The granulations were abundant and healthy, and the patient was discharged the sixteenth day, both wounds satisfactorily healed.

CASE III.—Mrs. H. D., married, aged forty-two, mother of four children, had cancerous nodules rapidly developing in the cervix uteri.

Dr. J. M. Lee, of Rochester, removed the entire uterus and right ovary per vaginam, on the 18th of February, 1890, with his usual careful antiseptic precautions.

First Day.—Operation began at 2 P.M., and lasted forty-five minutes. Uterus fully three inches in depth removed, together with the right ovary and Fallopian tube.

8 P.M.—Temperature normal; the absorbent cotton with which the vaginal orifice had been plugged was now removed and a plug of fine-cut plain tobacco substituted. There was plentiful oozing of a watery fluid from the vaginal orifice, which kept the wet tobacco moist.

Second Day, noon.—Temperature 99; pulse 64, a trifle wiry; respiration, normal; pain considerable; still nauseated from chloroform; changed tobacco tampon, and placed hot bottles at feet and hips.

7 P.M.—Temperature $100\frac{1}{4}$; removed tampon, and took away artery forceps, renewing tobacco tampon; ammoniacal urine constantly dribbling from the urethra, although the bladder is empty; this keeps the tampon saturated all the time. Pain much less soon after forceps were removed.

Third Day, 8 A.M.—Passed a better night, less pain, some sleep; considerable rumbling of gas in the bowels; no odor from the plug except ammoniacal; a warm douche of tobacco water, an ounce to a quart of water. Temperature $100\frac{1}{4}$; pulse, 94; respiration normal.

Third Day, 9 A.M.—Clamps removed, a careful douche of tobacco water used; no odor of wounds; pain much less after removal of clamps.

4 P.M.—Temperature $101\frac{1}{4}$; pulse 108; respiration normal; no bloating of bowels, but bladder still irritable; urine

still dribbling, but not so freely; no appetite, and no urging to eat on my part; gave a plentiful douching with strong tobacco water, quite warm.

Fourth Day, 8½ A.M.—Temperature $99\frac{1}{4}$; pulse 86; very little soreness in pelvic region; no oozing; most of the soreness complained of is at the pit of the stomach; no pain when still; no odor of wounds from vagina; copious tobacco injection per vaginam. Has taken, in all, not more than a pint of milk since operation up to date.

5 P.M.—Temperature $101\frac{1}{8}$; gave bowel enema, and afterward thorough vaginal tobacco-water douche. After this temperature 101 , in half an hour.

Fifth Day, 9 A.M.—Temperature $99\frac{1}{4}$; pulse 78; respiration normal; can now be turned on either side with no pain to mention; still no odor of wounds, but a slight odor of that kind to the end of tube when withdrawn after tobacco-water douche.

5 P.M.—Temperature $101\frac{1}{4}$; pulse 84.

After the eighth day, the temperature did not go beyond $99\frac{1}{4}$ in the afternoon, or $98\frac{1}{4}$ in the morning. There was some trouble with the bladder all the time; the urine was more or less dark, and some small clots of blood were passed.

On the eighth day the bladder was washed out with tepid water, and this contributed to the general comfort.

Tenth Day.—Record runs: 9 A.M., temperature $98\frac{1}{4}$; 4.30 P.M., temperature $99\frac{1}{4}$; no pain in the pelvic region, but some at pit of stomach when moving.

Tobacco douches were continued twice a day until the twelfth day; for a long time after this they were used once a day. The patient sat up on the sixteenth day, and an examination on the twentieth day showed an entire restoration of the pelvic roof.

She continued the warm douches of strong tobacco water for several weeks, using them two or three days apart, being led to do so from the relief which followed. I advised her

to try only warm water for a time, but after trial she insisted that the tobacco water gave much the greater relief.

During the year since the operation, she has experienced considerable trouble from the bladder, as she had done before the operation. At times she has passed small clots of blood, that have led me to fear a manifestation of the cancerous trouble in the bladder.

Arsenicum has been of the most use in relieving this, and I feel quite certain there has been a vesical ulcer, but from the way it has been relieved by treatment I do not think it is cancerous.

CASE IV.—John S., aged twenty, workman in a furniture factory, laid open his arm on a small circular saw, on the 22d of May, 1890.

The wound began at about midway from the elbow to the wrist, and ended at the border of the palm between the first and second fingers of the right hand. The bones of the forearm were not injured except at the carpal ends; here there was a clean cut through the carpus to the flesh at the back of the wrist. Through the palm the wound was not so deep, the middle of the metacarpals being uninjured, as also were the distal ends.

The patient was etherized, the wound thoroughly washed with tepid plain water, the bleeding points secured, the whole closed up with alternate deep and superficial sutures. In the middle of the palm it was thought best to leave a drainage point, and a small plug of tobacco was left in the wound. A large pad of dripping tobacco was laid over the closed wound. It healed by first intention all along the line, except in the palm. Some shreds of the plug which remained after its removal caused a small abscess at this point, and a small amount of drainage ensued. There was but little pain at any time; no inflammation, and very trifling amount of swelling. There was no odor of suppuration save at the palm, and this could not be detected at the distance of a foot.

The union was complete by the tenth day, and the palmar opening closed in the beginning of the third week.

I will mention but one case more. And this is to emphasize what seems to be a characteristic effect of tobacco treatment.

CASE V.—Fred. C., brakeman on the Delaware and Hudson Canal Company's road, caught the first finger and thumb of the right hand in the links while coupling cars.

The first finger was cut or torn to the bone, three fourths of its circumference, at a point just beyond the metacarpal joint. Between the first and second fingers was torn open on a plane parallel to the palm, while the palm showed a semicircular piece as large as a quarter dollar torn from the center of the palm toward the base of the first finger. It looked as if about all circulation had been cut off from the unfortunate member by these contused wounds. Had I not known what tobacco was capable of doing I would at once have amputated.

As it was, three deep stitches were taken and all edges fairly adapted. When this was done the finger had the appearance of a finger tied with a piece of elastic cord, blue-black, and perfectly cold to the touch.

The tip of the thumb was gone, the nail left entire and unhurt. The ball of the thumb was torn off so that it hung only by the inner edge. In a bruised pulpy mass it lay inward on the palm.

Even in this case I determined not to amputate until obliged to do so. The bruised mass was carefully washed, turned back, and held in place by a deep stitch almost through its center. The whole was dressed as in the other cases.

No sloughing occurred at any point. The wounds at no time had an odor of suppuration, and the circulation seemed to be resumed in all parts of the bruised tissue within twenty-four hours. The patient was discharged on the eighteenth day.

Tobacco is an antiseptic of very common use.

It would be hard to find one among the laity who has had any experience with wounds, and has not heard of using tobacco upon them.

Briefly these points have seemed to be established by my personal observation in its use.

First. It is the most thorough antiseptic of which I have any acquaintance. It seems to absolutely prevent fermentive changes in wounds.

Second. It seems to possess stimulative properties, to a wonderful degree, in restoring circulation in bruised and lacerated tissues; hence its properties are not negative in the aseptic sense, but positive in restoring the vitality of tissues. I have not thus far seen a sloughing point of tissue, connected with a healthy surface. The wounds to which it has thus far been applied have been absolutely free from sloughs, though in some cases seemingly predestinated to lose their vitality, from the nature of the injury.

It is doubtless on this account, also, that tobacco is so potent in the reduction of phlegmon in the glands, as in swollen testicle, and similar inflammations. It has in every instance in which I have employed it prevented phlegmon in the vicinity of wounds.

Third. It is an anodyne, a soothing power over pain in wounds.

By way of precaution, I must add, that all those cases in which I have employed it, thus far, have been more or less habitual users of the weed, the case of Mrs. D. not excepted.

In the further employment of this dressing, I would bespeak care when applying it to those unaccustomed to solacing their leisure by its use.

It has several drawbacks. It does not sound as high as listerine, or the one per cent. solution of mercurius corrosivus, or iodoform, or a score of other modern aseptics, most of which are only antiseptic in name, or dangerous poisons if absorbed.

It will also have to contend with the fact that it is very common, very well known, and withal inexpensive.

I have always employed only the plain fine-cut tobacco, such as is commonly put up in large wooden pails. This is as free from impurities as can readily be had in the markets. I would not advise any other.

MESSAGE IN GYNÆCOLOGY.*

BY

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There is very little known about massage, and still less interest is felt in the subject by educated physicians at the present day. If doubt should exist as to the truth of my statement, let a determined attempt be made to find any literature of consequence upon the subject. It is conspicuous by its paucity. Further, let any one of practical turn of mind seek to enlighten himself by inquiry among any number of practicing physicians as to the correct method of performing massage, the indications for its use, the theory of its action, and the permanency of its results, and he will be amazed at the dearth of information he will receive. This, at least, has been my personal experience. In 1876, Prof. Billroth stated in the *Vienna Medical Weekly* that there were many physicians in Germany who had never even heard of massage, and that it was then an every-day question as to what it meant. And yet massage, in its broadest sense of "manual treatment," is as old as the human race itself. It is a natural method of relieving pain, as witness the instructive rubbing and pressing of an injured limb or organ. It is, and has been from the time

*Read before the Mass. Gynæcological Society.

of Hippocrates, a recognized proceeding in surgery, and has always held an honored place. The passive motion of a joint contiguous to a fracture and stiffened by the immobilizing splint is an instance. In obstetrical practice, also, physicians for many years have unconsciously applied massage in rubbing the fundus uteri, after delivery, to promote contractions, before delivery, to overcome inertia, and in post-partum hæmorrhage to check the torrent of escaping blood. No one questions in these instances the utility of massage properly applied, or doubts these proofs of its value. Ancient literature, too, abounds with references to the prevailing custom of rubbing the body and limbs. In the Homeric Epics the heroes often "bathe and are rubbed from head to foot with olive oil." The Roman gladiators, before and after their desperate contests in the arena, kneaded their limbs to make them supple and to prevent abscesses from the wounds received. Even to the present day athletes have always been subjected to very similar training.

The foregoing instances will suffice to recall to our minds what we already know of the utility of the process, and also to impress the fact that it is practically massage, although not in every instance known under that name. In fact, the name itself has had an undoubted tendency to belittle the subject and to relegate its therapeutic application to magnetic healers and to quacks of like character and stamp. Another strong reason for the indifferent attitude of the profession regarding massage is the fact that until a comparatively recent date this method of treatment has always been in the hands of the laity. With a scanty knowledge of anatomy and of physiology, their claims as to results were, of necessity, lamentably extravagant, and served to strengthen the existing prejudice of the medical profession.

The application of the principles of general massage to the particular department of gynæcology was a direct consequence of the increasing importance of that specialty, and

as we would naturally infer was first taught and applied at Stockholm, Sweden. The credit of its introduction into gynæcological practice belongs to a Swedish layman, Thure Brandt by name. I am much interested in this man from the description given me by a German friend, who had personally visited his clinic at Stockholm. It was simply incredible, he informed me, the knowledge of gynæcological diagnosis which Brandt possessed. He had also, by independent study and observation at a time when the opinions of leading gynæcologists were very different regarding the normal position of the uterus, fixed definitely upon what is now universally accepted as the correct one, in anteversion. He also independently applied the bimanual method in gynæcological diagnosis.

In January, 1889, it was my fortune to enter the clinic of Prof. Friedrich Schauta in Prague. Here I first had an opportunity to see massage scientifically applied and its real efficacy demonstrated. Into this clinic were received only the severer cases of uterine disease, those suited to operative treatment or to massage, and in consequence this method could be most thoroughly applied and its real value determined. Under the direction of the Professor I worked for six months practically performing massage upon the cases assigned to me, and in addition having full opportunity to observe the results obtained by the other assistants practicing in the same clinic. As already remarked, the literature of gynæcological massage is most meager, and I can offer to-day only the results of my practical clinical experience. The methods followed were those of Brandt, learned directly from him by Prof. Schauta himself. The name massage should be changed to "Manual Treatment" as distinguished from strictly instrumental measures on the one hand and medication on the other. Also, the term as applied to gynæcology includes two distinct procedures, the one to effect the resorption of inflammatory products and the other the restoration to the normal position of the uterus

prolapsed or otherwise displaced through loss of tone of the natural uterine supports. This latter process is technically known as "Uterus-raising" (Uterus-hebung). Only the former, as will appear further on, can with any propriety be termed massage.

In order to a clear and complete understanding of massage technique it will be in order at this point to state briefly its indications and contra-indications. Under the former heading we may note chronic inflammations of the pelvic cellular tissue, *i.e.* parametritis chronica, with or without uterine displacement; displacements and adhesions of the ovaries, oöphoritis chronica and its consequences; metritis chronica before it has reached the stage of induration; hæmatocele, and finally weakening of the muscular supports of the uterus, resulting in descensus and prolapsus uteri. In brief, chronic inflammations of the uterus and its adnexa with their various sequelæ will suffice to sum up the indications.

As contra-indications we may note all acute inflammatory processes, the fever present showing active inflammation still going on, where massage will do far more harm than good; gonorrhœal infection, which makes such sad havoc with the whole genital system of the female; a high degree of nervous irritability, and lastly a very thick abdominal wall.

The technique of massage is by no means easy, as any one may convince himself by a few attempts. It is therefore very amusing to those who have worked patiently and perseveringly for months to learn the details, to read a paragraph like this as appeared in a recent number of the *Munich Medical Weekly*, by a physician who confessedly knew nothing by practical experience of Brandt's method, to the effect that every gynæcologist who understood the general principles of surgical massage not only could never do harm but could always obtain favorable results. Both of these statements are outrageously false.

As an actual clinical demonstration is impracticable at

this time, I will attempt a description first of the application of massage to the resorption of chronic pelvic exudations, and second to the restoration of the lost tonus of the natural muscular supports of the uterus.

In applying massage to pelvic exudations and the like, the patient lies on a low, short couch with the head and shoulders sharply raised, thighs and knees flexed, the operator sitting on the left of the patient. Under the left thigh of the patient the operator introduces the index finger of his left hand into the vagina to serve as a counter-prop for the pressure of the right hand on the abdomen. When extensive inflammatory deposits exist which cannot be controlled by the tip of one finger, it is allowable to introduce the index finger into the rectum and the thumb into the vagina. The left elbow of the operator is supported on the inner surface of his left thigh. The right hand, with fingers fully extended, is now laid on the corresponding part of the abdomen and with very gentle pressure slight rotary movements (*kreisförmige Bewegungen*) are made while the abdominal wall is gradually pressed deeper and deeper in, until finally the inflammatory deposit to be treated is felt firmly held between the finger in the vagina and those pressing in the abdominal wall. The rotary movements are then continued a longer or a shorter time around the periphery of the exudation. The finger and wrist joints must be kept perfectly stiff and all movement made with the elbow and shoulder. The massage is performed where possible not with the finger tips but with the palmer surfaces of the third phalanges of the index and middle fingers, or middle and ring fingers, or finally with all three. Where very extensive deposits exist Brandt is accustomed to employ at every sitting what he calls an introductory massage before he begins the massage proper. It consists in making the same pressing and rotary movements over the promontory and anterior surface of the sacrum, where the lymph glands for the most part lie, in order to empty these, and to

make them ready for the reception of new lymph from the side of the deposit. To apply massage, for instance, to a ligamentum latum infiltrated and shortened by an inflammatory process, we begin at the rim of the pelvis, and employing the same rotary movements of the right hand work gradually toward the median line of the body, stretching the ligament by forcing the uterus toward the opposite side of the pelvis, the finger in the vagina gradually changing place to correspond. All these manipulations must cause the patient absolutely no pain.

The duration of the single sittings, which are taken once or twice daily according to the sensitiveness of the patient, is from two to fifteen minutes. The first sittings especially should be brief, and the massage performed with very gentle pressure. After tolerance is established, longer sittings and strong pressure are as a rule well borne.

The treatment for the restoration of the normal tonus of the muscular support of the uterus is the so-called Uterus-raising (*Uterus-hebung*) of Brandt. The patient lies as above. The operator grasps both lower extremities of the patient under the knees, and flexes her thighs to a right angle, supporting himself with his left knee on the couch on which the patient lies and his right foot on the floor at the side of the couch, with the flexed knees of the patient resting against the hips of the operator. The operator now places the finger tips of both hands, strongly aupinated, on the abdominal wall somewhere in the neighborhood of the promontory, presses the skin of the abdomen downwards until his hands are nearly at the symphysis, and then presses the finger tips of both hands, which are close together, into the pelvic cavity between the symphysis and the uterus. Now keeping his arms firmly outstretched he bows his body until his face nearly touches that of his patient. The fingers are now slightly bent and grasp the front and sides of the uterus, and slowly and gradually force the fundus along the sacrum and promontory over the inlet

of the pelvis, when the uterus is raised to the maximum slowly and gradually, it is allowed to sink back again into the pelvis, and this manipulation is repeated two or three times at every sitting. This Uterus-raising is best performed with an assistant, who with finger in the vagina controls the position of the uterus if it should be in any manner displaced. It is evident that without an assistant and with a uterus strongly anteverted with fundus under the symphysis, the fingers pressed into the pelvis would pass entirely over and behind it. With a retroverted uterus the fundus would be pressed still deeper into the hollow of the sacrum.

The theory of the action of massage as applied to pelvic exudations and the like is apparently very easy to explain. It is doubtless the same as in massage of inflammatory products in other parts of the body, through derivation of the blood and lymph from the morbid center to the healthy circumference. According to the latest pathology the lymph spaces in the center of an inflammatory area are overfilled in consequence of increased transudation from the blood-vessels. The normal contractility of the elastic tissue in which the lymph spaces lie, a factor of the first importance in the lymphatic circulation, is thereby overcome. Further, this same overfilling of the lymph spaces would also compress to a greater or less extent their own efferent lymphatics together with the efferent blood-vessels of the part, and thus further increase the circulatory stasis. If now massage be applied to the *center* of such an inflammatory area, obviously the only effect will be to increase the transudation from the blood-vessels, whereby the lymph spaces will be still more engorged and their efferent vessels still further compressed. If on the other hand massage is performed on the *periphery* of an inflammatory exudate the efferent lymphatics are emptied, and thus made ready for the reception of new lymph from the area of inflammation. Brandt strongly emphasizes this practical point, that in extensive exudations massage must be begun on the periphery

and gradually carried toward the center as the exudation resolves.

The action of massage in thinning and resolving adhesions is also easy to understand. It is merely a combination of the above derivative process with the gradual mechanical stretching and tearing apart of adhesion bands in the direction of their length.

The most difficult to understand and to explain is the theory of the so-called Uterus-raising in descensus and prolapsus uteri. On first thought it would seem that the stretching of an already weakened support would render it weaker still. When we reflect, however, that all the uterine supports, with the exception of the utero-vesical ligament, which does not support the uterus at all, are true muscles both in anatomy and in function, and that a weakened muscle in any other part of the body by judicious manipulation can be made stronger, we can comprehend by analogy the general principles of the process, although the minute physiological details remain as yet unexplained. They are no doubt comprised under the general head of increased freedom of circulation through the affected muscular structures.

The practical results of massage have been tested by Chrobak, Schroeder, Bandy, Heitzmann, Schultze, Schauta, Profanter, and other leading gynæcologists. The fact that these men of eminence have not deemed it beneath their dignity to spend months at Brandt's clinic to learn his methods lends influence and character to the procedure. No less an authority than Prof. Schultze of Jena, writing under the date of February 2, 1887, after a most critical test in his own clinic of the utility of Brandt's method under the personal supervision of Brandt himself, says, "I am convinced that massage of the female pelvic organs, especially the method of Brandt, gives most excellent results in thinning and absorbing old parametric adhesions and exudations of the uterus and adnexa, and in restoring

to a normal position the uterus displaced by loss of tone of its normal supports." Again, "I have now not the slightest doubt that in the Brandt method of massage of the female pelvic organs our gynæcological therapy has been enriched by a method of treatment which with the utmost advantage can take the place of a large share of our customary operative mechanical and medical procedures with much more satisfactory results." Other equally unreserved opinions from eminent gynæcologists might be quoted, but as personal experience and observation are more convincing to one's self at least, I perhaps may be pardoned an allusion thereto. During my term of service in the clinic of Prof. Breisky in Vienna, I had an excellent opportunity to see and to treat a large number of cases of chronic para- and perimetritis with exudations and infiltrations of long standing, by the customary methods. Prolapsus uteri was treated with pessary or the knife. In the clinic of Prof. Schauta at Prague, I had an equally good opportunity to observe the same class of cases, and to treat them by the new method exclusively. In chronic inflammations and their sequelæ I have seen massage accomplish in from two to six weeks what would require from four to six months or longer by the ordinary methods. In prolapsus uteri I have occasionally seen a completely prolapsed uterus remain in place permanently after three sittings without pessary or artificial support of any kind. The average duration of massage treatment for prolapsus is from ten days to two weeks.

The greatest obstacle to the general availability of massage in gynæcology is the extreme difficulty of the diagnosis required in order to obtain sure results. In fact, only a master of the art of gynæcological diagnosis could at the outset feel any certainty as to the results he ought to obtain. More knowledge of the details, normal as well as pathological, of position, connection, relation, size, and consistence of the pelvic contents is, in fact, required than for any other method of gynæcological procedure. This diffi-

culty can, however, like any other one be overcome by perseverance, and it is astonishing and gratifying as well to note in one's self the gradual development of a "tactus eruditus" from the practice which massage will give him. It is on that account pre-eminently a school and hospital method, and there is not an earnest student of medicine living who would not be profoundly thankful for the diagnostic readiness and skill acquired by the practical use of gynæcological massage even if he never made use of it in a single instance in his private practice.

And now comes the by no means unimportant question, of the practical use of massage in private practice. Prof. Schauta informed me that he relied upon it, and applied it in his own private practice just as readily and with just as good results as in his hospital clinic. Other eminent gynæcologists also in the old country do the same. When I commenced my own private practice I was, therefore, very enthusiastic in my determination to apply the method in the indicated cases as nearly as I could select them. Experience, however, "who keeps a dear school," has firmly persuaded me that on moral grounds entirely it will be the part of sound wisdom to lay massage, practical and positive in results as it undoubtedly is, on the shelf until my locks are white and the mantle of age invests me with its dignity. It is with the utmost regret that I do this, but the erotic manifestations unavoidably produced by the most careful and circumspect manipulation are so profoundly embarrassing to patient and to operator as well, that the objection on that score alone is insuperable. This objection evidently does not hold in school and hospital clinics, where more persons are present and more confusion tends to divert the mind of the patient from herself. Our women gynæcologists also, who have made for themselves such an honorable place in this branch of the profession, would here have an immense advantage over their brethren.

The Uterus-raising to which I have referred before is not

practicable in private practice, incidentally because of the awkward and undignified positions it requires, but chiefly because an assistant is absolutely necessary to insure its success, if employed according to the Brandt method. I have, however, personally applied the principle on which the method rests in several cases of prolapse of which the following is one. I quote it because recent, and will omit unnecessary details.

May 5, 1890, Mrs. B. consulted me at my office. Since the tedious delivery of her fourth and last child four years ago, she has been an invalid. A history of puerperal fever was given, but nothing remained in the shape of infiltration or of exudation to mark its previous existence. Examination revealed prolapse of the uterus with the frequent concomitants of rectocele and cystocele. The rectocele gave her the utmost annoyance by filling with fecal masses at every defæcation, and for this condition mainly she sought relief. The uterus was enlarged considerably, freely movable, with slight ectropion of the cervix. The vagina was very large, and its tissues lax and flabby. A slight lateration of the perineum was present. To afford immediate relief the indications were of course for colonrhaphy, but she was very anxious to wait until after the ménopause, which she is fast approaching, in the rather groundless hope, as I thought, that operation might not be necessary. As the next best means at my disposal, I bethought myself of the Uterus-raising. I armed the end of a Peaslee's dilator with a ball of wool, and introduced it into the vagina behind the cervix. Then, with the perineum as a fulcrum, I gradually raised the uterus, contrölling the fundus with one hand over it on the abdomen. After the Brandt method the uterus was gradually raised to a maximum, stretching tight the vaginal walls. This manipulation was repeated four or five times at a sitting, and the perineal muscles also exercised by causing the patient to raise her pelvis supporting her body on her feet and shoulders only. After six sittings

within two weeks, the uterus regained its normal position and has remained therein to the present time, while the rectocele is so far obliterated that a movement of the bowels does not fill it with fæces as formerly. There was no other treatment, medical or mechanical, employed.

‘This method is very simple, and can be employed by any one, while the principle is precisely the same as by the Brandt method. An instrument of hard rubber or other light antiseptic material, shaped like a drumstick, and covered with cotton or wool, might be an improvement over the Peaslee’s dilator, as it would hurt the perineum less than the small handle of the sound.

In concluding the subject we may note that gynæcological massage is winning the most favorable recognition from eminent specialists of the Old World. Prof. Chrobak, himself a most judicious advocate of Brandt’s methods, has recently succeeded to the chair of the late Prof. Breisky, and with the unlimited material of that great clinic at his disposal, we may look with interest for authoritative utterances on this subject. In our own country, massage is being applied with more or less of scientific exactness, but with results amply sufficient to justify its legitimate claims. I have emphasized the details of the Brandt method, believing as I do that one great hindrance to the general employment of massage has hitherto been the lack of a uniform and scientific method on the basis of which results can be accurately estimated. It is my firm belief that in the near future the treatment by massage is to be one of the most reliable and important remedial measures in the hands of the gynæcologist.

—The blades of the obstetrical forceps of the Hodge and similar patterns should be applied to the sides of the child’s head, and not to the sides of the mother’s pelvis. The opposite is true of the Simpson forceps, and those modeled after it.

● EDITOR'S TABLE. ●

—We have already had several very good articles, from Dr. William Goodell, that are so many indications that he is now entering upon a more mature period of his gynæcological experience. The last, on "What I have Learned to Unlearn in Gynæcology," (*Med. News.*, November 29, 1890), is really worth following to a limited extent. "Every earnest worker in any field of the inexact sciences finds himself compelled to unlearn as well as to learn. The errors which he discovers and weeds out will usually be traditional teachings,—the legacies of our forefathers,—for we get many of our opinions, as well as many of our diseases, by heredity. What I have thus learned to unlearn in the treatment of women's diseases will be the burden of this paper." We shall briefly note the experience of this eminent authority.

* *

—"To begin with, then, I have learned to unlearn the grandmotherly belief that the climacteric is in itself an entity, and that, as such, it is responsible for most of the ills of matronhood, and especially for that of metrorrhagia. True, it must be conceded, that as an entity it does seem to disturb the vasomotor system. Yet, contrary to the prevalent lay and professional belief, how rarely can true uterine hæmorrhages or other uterine discharges be traced to the climacteric as a cause in itself. Yet many a poor woman has lost her health, her life indeed, by her own and her physician's traditional belief that her hæmorrhages, or other vaginal discharges, are critical and due to the 'change of life.'

* *

—"I have learned to unlearn the teaching that woman must not be subjected to a surgical operation during her monthly flux. Influenced by hoary tradition, modern physicians very generally postpone all operative treatment until the flow has ceased. But why this delay, if time is precious, and it enters as an important factor in the case? I have found menstruation to be the very best time to curette away fungous vegetations of the endome-

trium, for, being swollen then by the afflux of blood, they are larger than at any other time, and can the more readily be removed. While I do not select this period for abdominal operations, yet I have not hesitated to perform laparotomies at such a time, and I have never had reason to regret the course. The only operations that I should dislike to perform during menstruation would be those involving the womb itself. This exception is based upon the danger of hæmorrhage arising from the increased vascular tension and pelvic hyperæmia. For obvious mechanical reasons it would hardly be wise to sew up the torn cervix of a menstruating womb.

* * *

—"I have learned to unlearn that antelexion and anteversion in themselves—that is to say, as displacements merely, and without narrowing of the uterine canal—are necessarily pathological conditions of the womb. The mistake made is in attributing to this natural position of the womb the various forms of pelvic trouble, especially that of irritability of the bladder, to which women are so liable.

* * *

—"I have too learned to unlearn the idea—and this was the hardest task of all—that uterine symptoms are not always present in cases of uterine disease; or that, when present, they necessarily come from the uterine disease. The nerves are mighty mimes, the greatest of mimics, and they cheat us by their realistic personations of organic disease, and especially of uterine disease. Hence it is that even seemingly urgent uterine symptoms may be merely nerve counterfeits of uterine disease. I have, therefore, long since given up the belief, which, with many, amounts to a creed, that the womb is at the bottom of every female ailment." Finally, since we have not the space to follow Dr. Goodell to the close of his long article, it may be added, as a corollary to this, that the physician who recognizes the complexity of woman's nervous organization and appreciates its tyranny, will touch her well-being at more points and with a keener perception of its wants than one who holds the opinion that woman is a woman because she has a womb.

—In pursuing the differential diagnosis of cancer of the uterus nearly all text-books say that histological examination of fragments removed with the curette will sharply define the character of the tissue that has been thus obtained and at once settle the question. Pozzi, in his last text-book on gynecology, points out that this is an error, and that there are some cases where the differentiation from metritis, even with histological examination, meets with great difficulties. There are cases where, with an assemblage of common rational symptoms, in particular a persistent resistance to therapeutic measures, and the examination of the insignificant fragments that the curette removes, the diagnosis is still doubtful. Now, if the histological diagnosis is easy when one has the entire uterus at disposal, it is quite otherwise when there are only the small fragments of the mucosa for section. The simple glandular hypertrophy of endometritis may then be very difficult to differentiate from epithelioma, especially when in the fragments of the mucous membrane, the whole depth of the gland cannot be examined. It may thus happen that we will be obliged to make a vaginal hysterectomy on the simple diagnosis of a probability, and as an ulterior recourse against a persistent metrorrhagia which menaces life. First, however, we assure ourselves by examination of the appendages that they are not the origin of an hæmorrhagic reflex. From a section of the uterus thus removed the characteristic lesions of epithelioma have sometimes been determined, when examination of the fragments furnished by the curette revealed nothing of malignant nature. Martin and Lohlein have cited cases of this kind that are very instructive.

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—We are pleased to learn that the International Committee has concluded to abandon the policy of restricting the bureaus of gynecology, obstetrics, and pædiatrics to considerations of homœopathic therapeutics. And now it is to be hoped that our leading gynecologists will put the best foot foremost and show our brethren of the opposite school that we have men who are not only abreast of them in surgical experience, but that we possess resources of which they know but little.

● GOLDEN GRAINS. ●

—The characteristic leucorrhœa of *iodine* sometimes points it out as a remedy for cancer of the uterus. It seems particularly indicated where the hæmorrhages are profuse, with a thick, yellow, corroding discharge. These, taken with the symptoms of debility produced by iodine, the sallow, tawny skin, the rapid failing of strength, and the great debility with emaciation, all bring it out prominently as a remedy for uterine cancer.

—Dr. Forcheimer sums up the use of the lancet in teething children as follows: 1. It is useless (*a*) as far as giving relief to symptoms; (*b*) as far as facilitating or hastening teeth. 2. It is useful only as blood-letting, and ought not to be used as such. 3. It is harmful (*a*) in producing local trouble; (*b*) in producing general disturbance on account of hæmorrhage; (*c*) in having established a method which is too general to do specific good, and too specific for universal use. 4. It is only to be used as a surgical procedure to give relief to surgical accidents.

—There are several remedies that are closely associated in spasm of the glottis, but among them two are particularly pointed out on etiological principles. If the trouble be reflex from dentition, calcarea phosphorica promises better than anything else, according to Farrington. If the spasm is found to be the result of an enlargement of the thymus gland, iodine will be indicated.

—According to the *Annales de Gynécologie*, Drs. Laulanie and Chambrelent have carried out experiments to determine the toxicity of the urine during pregnancy. According to M. Bouchard, the mean toxic power of the urine in the non-gravid state is 45 cubic centimeters per kilogram of the animal, that is to say, it is necessary as a rule to inject 45 cubic centimeters of urine from a healthy person per kilogram of the animal in order to kill a rabbit. While 45 cubic centimeters are taken as a mean, the limits are found to extend from 30 to 60 cubic centimeters. In making their injections, the authors were careful to see that the chemical reactions of the urine employed were normal, that the woman

from whom the urine was taken was healthy, and that the specimen of urine injected into the rabbit was taken from the total collection of twenty-four hours. The conclusions arrived at were as follows: That under the influence of pregnancy the degree of toxic power of the urine was markedly lessened, and, as a consequence, that the organism of the pregnant woman at the termination of gravity must be more or less saturated with toxic material.

—*Drosera* is indicated for a harassing, titillating cough in children at night as soon as their heads touch the pillow, but not at all in the daytime. Conium is also a remedy for cough, with aggravation as soon as the head touches the pillow. But it has a troublesome cough during the day.

—A definite relation exists between uterine fibroids and sterility. Whether the sterility is a cause or a consequence of the morbid growths is not positively determined. Statistical compilations show that above seventy-five per cent. of the women having fibroid tumors have never borne children. This may be regarded as fortunate, for in cases of labor complicated with uterine fibroids over half of the mothers and nearly two thirds of the children die.

—Dr. Cachazo has tested the action of vaccine virus in five extremely severe cases of whooping cough (*Ther. Gaz.*). Of these five cases, four were of such extreme severity as to threaten life. The convulsive attacks were accompanied by threatening suffocation from vomiting and bleeding from the mouth and nose. Dr. Cachazo vaccinated each of these cases, and, as soon as the febrile symptoms of the vaccination appeared, the situation was entirely altered. The coughing almost entirely ceased, and was then simply of a catarrhal character, and disappeared altogether after eight or ten days. During the existence of the vaccine disease the patients were treated with inhalations of one per cent. carbolic acid solution.

—At the recent International Congress on Alcoholism, held at Christiania, Professor Demme, of Berne, presented an interesting communication on the influence of alcohol among children. He has chosen two groups of 10 families each; the first group com-

prised 57 children, more or less manifestly affected by alcohol; the second, 61, remaining unaffected, or only slightly affected by alcoholism. Out of the 57 children among which the effects of poisoning were noted, 20 had a drunken father, the mother and grandmother being moderate drinkers; only 9 of these 20 children had a good constitution; for 31 drunkenness existed in the father and the grandfather, the mother and the grandmother being temperate; only two of these children were healthy; finally, 6 children had parents and grandparents that were alcoholic; only one of these six children survived, and it had attacks of epilepsy. Out of the 61 children of the second group, belonging to temperate families, eighty-two per cent. enjoyed good health, 3 are dead, and only 8 are unhealthy. Demme has also made the following experiment on several children: During eight months these children were rigorously deprived of all alcoholic drinks; during the four months following they were permitted a habitual use of wine weakened with water. Now, it was noted that during the first period the children had a more profound and a longer sleep, and that they were more lively and more active than during the period in which wine was authorized. Such an experiment is very useful to show the folly of those who prescribe the wine of quinquina and pharmaceutical wines intended to be more or less reconstituent.—*Médecine Moderne.*

—*Argentum nitricum* is indicated in cholera infantum in children who are thin, dried-up looking, almost like mummies. The legs are apparently nothing but skin and bones. The stools are green and slimy, with noisy flatus, and are worse at night.

—An hysterical attack is characterized by a general diminution in body nutrition. The fixed residues, the urea, the phosphates are diminished in the proportion of about one third. The relation of the acid phosphate salts to the phosphoric alkaline salts, which normally is one to three, tends to become two to three. The chlorides are in general augmented. The same conclusions apply to a state of long hysteria and to epileptoid attacks.

—Dr. Kramer (*Brit. Med. Jour.*) describes a case of fibroma of the chorion. Hyrtl has previously written on an instance of

sarcoma of the chorion. In Dr. Kramer's case, the patient was twenty-five years old. At the seventh month of her third pregnancy she gave birth to twins, with separate placentæ; each amnion was dropsical. One placenta was normal, the other was over eight and a half inches broad and two and a half inches thick. A marked prominence was observed on its fetal aspect. On pushing aside the chorionic villi, two tumors were detected, deep in the placental tissue, and invested by a fold of chorion easily peeled off; numerous vessels ran in the chorion to the tumors. The new growths were reddish-brown and of the consistence of a soft fibroma. The microscope showed that each tumor possessed many of the characters of a small round-celled sarcoma. As, however, it did not appear in Dr. Kramer's opinion to be malignant, and was made up of young connective tissue, that writer preferred to term the tumor a fibroma. Many may differ from his judgment, and Hyrtl's tumor, described as a sarcoma, was probably of the same character. The tumor appeared to have grown from the chorion, rather than from placental tissue.

—According to M. Lamare (*Gazette Med. de Paris*), spontaneous rupture of the umbilical cord is frequent in the abnormal attitudes, but is rare, although possible, when the woman is delivered in dorsal position. The tenacity of the cord, that is to say the limit of the resistance it opposes to rupture, is infinitely variable; its fragility, as its resistance, may be extreme. A living cord (injected) is less resisting than a dead cord. M. Lamare shows that a living cord breaks by the tension of a weight of two to three kilos inferior to half the weight of a child at term. For the cord to break by the sudden traction offered by the fall of a weight from the height of twenty-five centimeters, one to two kilograms is sufficient. In spite of the contrary opinion of Tardien, M. Lamare affirms that the child may be propelled from the maternal parts as a cherry stone pressed between two fingers, and that the uterine contraction alone is sufficient to propel the fœtus and cause the rupture of the cord. It is the same as to the voluntary effort of the woman. Much more, the movements of the fœtus, inside and outside the uterus, may rupture the cord; but the shortness no more than the thickness seems to directly favor its rupture. The spirals and vascular anomalies of the cord

are the weak points where it is most often ruptured. One shock alone may besides produce many ruptures of a cord.

The seat of the spontaneous rupture affects the sixth or seventh terminal, and much more often the foetal extremity than the placental. The surface of rupture by tearing is beveled or irregular, as the expulsion has been rapid or not. Hæmorrhages from the cord attached and not tied are exceptional.

—Keppler, of Vienna, has been able to keep a number of women under observation for several years after the removal of both ovaries, and has deduced the following physiological conclusions: 1. After an operation practiced for salpingitis or an inflammatory process, there has never been a subsequent flow of blood from the uterus. 2. The conjugate diameter is progressively shortened, and that the more as the woman is younger; this shortening may be three centimeters. 3. The uterus gradually diminishes in volume (from eight to ten centimeters in the space of ten years); in the same time the vagina has become shorter and narrower; the mucosa has become paler and the labia majora thinner. 4. The breasts are atrophied and have taken the aspect of those of men. 5. The pigmentation of the nipples of the areolæ, the perineum, and the anus has disappeared, also the pathological pigmentation (cloasma). The skin has become remarkably white. 6. The tendency to general *embonpoint* has not been augmented. 7. It has not produced any modification either of the hair or of the voice. 8. The sexual appetites have remained the same, and they are so much the more pronounced as the operation has been made at a nearer date to the appearance of menstruation. 9. The operation is not an obstacle to marriage; three patients have been married and have had a happy household for many years. 10. Marriage with a castrated woman is the ideal Malthusian union, the only way to apply the doctrine of Malthus with rigor, without putting the health or happiness of the husband and wife in danger. 11. With women who have been operated on in their youth for inflammatory affections, nervous troubles do not occur, as have been frequently found with women operated on at a more advanced age for uterine fibroids. 12. Hæmorrhages due to uterine fibroids are advantageously influenced by castration, but the men-

opause has never been seen to occur immediately afterward. 13. Women operated on at an already advanced age for uterine fibroids completely lose their sexual appetite.

● GYNECIC ETCHINGS. ●

—Dr. G. Leopold (*Centblt. f. Gynäk., Brit. Med. Jour.*) has performed all his abdominal sections since March with the patient's hips elevated. The patient is placed horizontally on the operating table, with her hips and legs over a shelf. When she has been brought under the influence of the anæsthetic the shelf is raised, and is kept at the desired angle by the same contrivance as in an ordinary bed rest. The intestines then fall anatomically upward toward the diaphragm, the pelvis becoming free of them. No troublesome prolapsus of the gut through the abdominal wound during imperfect narcosis can occur. A large flat sponge is placed over the intestines to guard them, and thus eventration of some coils of gut in order to explore puzzling conditions in the pelvis becomes needless. The pelvic organs can be seen with ease; the promontory of the sacrum comes into view. The sewing up of a large peritoneal wound, after removal of a uterine fibroid, can be managed with comparative ease. The bystanders can see all the area of operation. As the operator can get so deep a view of the pelvis, there is no fear of clots or pools of pus and sanies being left behind. The ureters and other structures passing over the brim of the pelvis can be seen; this is often impossible when the patient lies on her back. The operator, assistants, and chloroformist stand as in cases when abdominal section is performed in England. The shelf is lowered when the superficial sutures are applied to the abdominal wound. The elevation of the pelvis did not prove prejudicial to any patients. Dr. Leopold finds so many advantages in this position that he always operates in severe cases after the new fashion, which was originally recommended by Trendelenburg. The patient's right thigh is "a comfortable support" for the operator when necessary. Sixty-four cases have been operated upon with

elevation of the pelvis, namely : ovariectomy, 21 cases ; castration, 6 ; extra-peritoneal myomectomy, 5 ; supra-vaginal extirpation of the uterus, 8 ; Cæsarean section, 6 ; extra-uterine pregnancy, 8 ; and 10 other operations.

BOOK REVIEWS.

A COMPEND OF DISEASES OF CHILDREN. By MARCUS P. HATFIELD, A.M., M.D. Philadelphia : P. Blakiston, Son & Co., 1890.

Hatfield's "Diseases of Children" constitutes No. 14 of Blakiston's quiz compends. It contains a careful condensation of this subject for the use of students, and is adapted for a thorough teaching of the knowledge that should be acquired before entering upon clinical experience. There are also a number of practical hints scattered through the work which are of value.

STERILITY IN WOMEN, INCLUDING ITS CAUSATION AND TREATMENT. By ARTHUR W. EDIS, M.D. Philadelphia : P. Blakiston, Son & Co., 1890.

This is, in part, a reproduction from Edis's "Manual of Diseases of Women," but, since considerable additions have been made, it is practically a new work. The author has taken great pains to make this thread-bare subject interesting to his readers, and we are pleased with his book to a certain extent. It seems to us, however, that hardly sufficient stress has been given to the secondary effects of gonorrhœa. To dismiss such a far-reaching disease in a few paragraphs is not justified, when we know how important is its rôle in the etiology of sterility. We must also criticise the author's advocacy of the use of caustics as a means of modifying a diseased cervix, and our criticism will gather more weight from the fact that some of the best old-school authorities have lately discarded such agents as dangerous, both in their primary and in their secondary effects. Finally, we believe it is unnecessarily complicating our work by producing a long treatise on a condition which is at best only a symptom, and consequently demands a review of the whole subject of gynæcology, as it may be associated in certain conditions with any of woman's diseases.

THE CONCORDANCE REPERTORY, vol. iv. By WILLIAM D. GENTRY, M.D., New York. A. L. Chatterton & Co., 1890.

The Repertory is now speaking for itself in the hands of so many that it seems almost superfluous to review it. The present volume, however, relates so directly to our special subjects that it cannot be passed by unnoticed. Its division into "Uterus and

Appendages, Menstruation and Discharges, Pregnancy and Parturition, Lactation and Mammary Glands" is particularly useful in tracing symptoms. The one hundred and fifty odd pages that are devoted to pregnancy and parturition constitute a feature of the work with which no other repertory can pretend to compare. We certainly are keeping pace with the dominant school in the latest advances of surgery of the uterine appendages, and it is to be hoped that we may more than excel them in therapeutical resources now that we have at our disposal that portion of the *Concordance* which relates to these organs.

BÖENNINGHAUSEN'S THERAPEUTIC POCKET-BOOK. By T. F. ALLEN, M.D. Philadelphia: The Hahnemann Publishing House, 1891.

Böenninghausen's work is so well known that it is only necessary to note this new American edition as containing additions of new remedies to bring the book up to date. As a pocket repertory it will certainly be very handy as a means of ready reference. Condensation to a pocket-book size has, however, the disadvantage of rendering the symptomatology somewhat obscure in portions. The section on leucorrhœa is well arranged, but as to being of aid, other than this, in gynæcological work, the remainder of the portion devoted to the female sexual organs is too vague. If one should desire to look for pain in the left ovary of any particular character all the guide given by Böenninghausen consists in the 76 remedies mentioned under the bare heading "*Ovaries.*"

COMPEND OF GYNÆCOLOGY. By HENRY MORRIS, M.D. Philadelphia: P. Blakiston, Son & Co., 1891.

For the use of the student this compend contains the essentials of gynæcology. We might say, it contains even more, for certainly no beginner in gynæcological work should be advised to venture upon the capital operations, such as vaginal hysterectomy, upon what can be gathered merely from book descriptions. In touching upon such operations we consider that a work intended as a compend includes that for which the student should be referred to the text-book. One portion of the book is particularly good, that is the section on gynæcological exploration. This portion alone makes it one of the best works for the student that has ever appeared in compend form.

BOOK RECEIVED.

KING ON HEADACHES, new edition, cloth \$1.50. New York: A. L. Chatterton & Co.

THE HOMŒOPATHIC JOURNAL OF OBSTETRICS, Gynæcology and Pædology.

A. L. CHATTERTON, EDITOR AND PUBLISHER.

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2. For the convenience of subscribers, this journal will not be discontinued until so ordered.

No. 3.

MAY, 1891.

VOL. XIII.

ABDOMINAL DISTENTION.

BY

H. C. ALDRICH, M. D.,

MINNEAPOLIS, MINN.

Within the past eight months two distressing cases of this description have come under my observation.

In the first, a case of soft sarcoma of the uterus, in a married woman of thirty-two years, the growth had been very rapid, and latterly attended by so much hæmorrhage that she was incapacitated from work.

On opening the abdominal cavity, the line of the peritoneum was found exceedingly high on the growth, which was so markedly sessile that the ordinary method of treatment was impossible. I therefore adopted, to a certain extent, a plan which was brought before the British Gynæcological Society by Dr. Bantock of London.

First of all I put on an elastic ligature, then divided the peritoneum all around, stripping it down below the base of the tumor, even to the cervical portion of the uterus. I next secured the ovarian vessels on either side and applied the *serre-nœud*, after having removed the growth, with the

larger portion of the fundus uteri, down to the level of the internal os. In this way I had made a pedicle which was entirely extra-peritoneal, through which I now introduced the pins.

The peritoneum, which had been stripped from the growth and uterus, was now carefully stitched to the edges of the abdominal wound, thus hermetically closing the cavity of the peritoneum.

Following the operation there was no marked constitutional disturbance; the pedicle sloughed away and the *serre-nœud* was removed on the thirteenth day, the patient making a rapid and uninterrupted recovery.

The cavity of the uterus was large and decidedly granular, to which fact, in connection with the sarcomatous growth which extended through to the uterine cavity, I attribute the excessive hæmorrhage.

The second case is a married woman, aged twenty-nine, mother of four children, still under my care but making satisfactory progress; this case has a history of twelve months' duration. She came under my observation after having passed through the hands of thirty-one physicians of both schools. Examination showed a pale, thin, rather undersized woman, with a listless and anxious aspect; bearing, to my mind, the same general expression of countenance noticed in those suffering from spinal curvature.

In the abdomen, occupying nearly the entire left side, was an irregular mass, which, below the umbilicus, extended over to the right of the median line several inches—firm, hard, and inelastic; careful and as deep pressure as could be borne by the patient revealed the fact that the edge near the median line was sharp and well defined. The tumor did not press on the bladder or rectum sufficiently hard to produce any inconvenience, but did, from its pressure on the brim of the pelvis, interfere with the return circulation from the legs to such an extent that there was marked œdema of the feet and ankles. Chemical and microscopical

examination of the urine, *nil*. Temperature normal; pulse, 96; respiration, 24.

A thorough examination of the patient brought me to the conclusion that the abdominal distention was caused by a growth of the spleen, probably sarcomatous in its nature. The woman was suffering from dyspnœa, loss of appetite, insomnia, a severe hacking cough, and profound depression, and was entirely incapacitated from performing her ordinary household duties. I saw her first on February 19, when the following dimensions of the abdomen were taken.

Pubis to umbilicus.....	8 inches.
Sternum to umbilicus.....	7 "
Left ant. sup. spine of ilium to umbilicus....	8 "
Right ant. sup. spine of ilium to umbilicus....	9 "

Sulphonal relieved the insomnia. Under a liquid diet of milk and Bovinine she has gained in strength. The cough seems to resist all treatment directed toward its relief.

Feeling that operative procedures were out of the question, I put her upon the iodides of lime and arsenic, hoping to get some benefit from their action. No benefit followed their administration, and on the 29th of March, thirty-eight days after I first saw her, the abdominal dimensions had increased as follows:

Pubis to umbilicus.....	8 inches.
Sternum to umbilicus.....	7½ "
Left ant. sup. spine of ilium to umbilicus....	10 "
Right ant. sup. spine of ilium to umbilicus....	10 "

On this date (March 29) I began the use of parenchymatous injections of a 1-500 solution of pyoktanin, a drachm and a half of the solution being used at each injection, the injections being repeated every third day, following the method adopted by Von Mosetigmoorhof, of Vienna. The regularity of the injections were interfered with by an attack of la grippe. On the 12th of April I resumed the

injections, using the solution in a strength of 1-300, and administering them every second day. From this time on, there was a slight discoloration of the cutaneous surface of the abdomen, and a very marked softening in the growth. At the present time there is a very distinct decrease in its size, and I have every reason to believe that both from the improved condition of the woman's health and the ready response to the action of the pyoktanin, that before the summer has passed I shall have my patient on her feet again, a well woman.

THE HEART DURING PREGNANCY.*

BY

E. M. HALE, M.D.,

CHICAGO, ILL.

In a healthy woman the heart, during the period of pregnancy, undergoes a change which is called physiological hypertrophy. It differs from a pathological hypertrophy in this: that the enlargement is not due to any valvular disease, or any obstruction to the general circulation, but resembles the physiological enlargement of the uterus during the same period. In both organs the muscular fibers grow larger and larger, and a kind of fatty deposit takes place in or between them.

After confinement the uterus undergoes a change which is called involution, *i. e.*, it returns to its normal size and weight. When this change is not complete, and the uterus remains larger and heavier than before pregnancy, the condition is called *sub*-involution.

* Read before the Bureau of Obstetrics at the meeting of the Illinois State Homœopathic Medical Society, May, 1891.

It is the same with the heart. It generally undergoes, after confinement, an involution so complete that it is no heavier or larger than before pregnancy. What is the cause of this enlargement of the heart?

During pregnancy more blood is required to nourish the growing foetus, and this blood requires, in order that it shall penetrate and permeate the placenta and foetus, an organ possessing greater power than it had before the pregnancy occurred. This condition is sometimes a source of anxiety to the mother and her physician, for the increased impulse and action of the heart is often mistaken for diseased action.

In some plethoric women, this normal action may indeed cause considerable discomfort, and may necessitate some change in the diet of the woman, but rarely needs medicinal treatment, except in paroxysms of tachycardia, due to emotional excitement or unusual physical exertion, when a few doses of aconite or veratrum viride may be required. Usually an abstinence from beef, coffee, or alcohol is all that is necessary.

But if the pregnant woman has already a diseased heart, then the conditions are changed. If she has dilatations of the heart, with thin tissues, the case is not bad, provided she is well nourished and leads a quiet life, for the thin walls often become thicker from a growth of the muscular fibers, just as in *compensation* in some minor valvular troubles. But if this does not occur, the increased strain upon the heart necessary to carry on an increased circulation aggravates the dilatation, with serious results.

In cases of real hypertrophy, which has obtained before pregnancy, the increased work of the heart aggravates the enlargement, and we find a condition which under other conditions would be called *undue* compensation, and will be attended by general plethora and local congestions. In such cases we get hæmorrhages from the nose, lungs, and intestinal canal—efforts of nature to relieve an overbur-

dened arterial system. Here again, a diminished diet of nitrogenous foods, coffee, and stimulants, aided by aconite, cactus, veratrum viride, and belladonna, enable us to ward off dangerous results.

A *weak* heart during pregnancy, whether due to thinning of its walls, or a lack of nerve power, is always a source of danger, the chief of which is *venous stasis*. This occurs always when the heart is not strong enough to fill the arterial system.

Every organ may suffer, or one alone may be the chief sufferer. The organs which most often suffer are the kidneys, for the reason that they are generally pressed upon by the enlarged gravid uterus. The arterioles are not full, and the capillary circulation in the kidneys is feeble. This soon results in deficient nutrition, accompanied by venous congestion. A sub-acute nephritis is set up and uræmia or dropsy attains. Or the uterus may be the seat of the venous stasis. One eminent writer asserts that this is one of the chief causes of miscarriages and premature labor.

If this woman goes on until confinement, it is apt to be a lingering and painful one, and after labor the uterus rarely undergoes normal evolution. The brain, lungs, and liver may all suffer from the same cause, and the whole period of pregnancy become a real pathological condition.

I cannot now go into a detailed treatment of such conditions, but I would earnestly insist that the heart be watched, and upon the slightest appearance of any weakness in that organ, a nutritious diet and a quiet life be advised. In addition, prescribe those medicines which increase the muscular and nervous tonicity of the heart. *Digitalis*, *cactus*, *anhalo nuim*, *strophanthus*, *cimicifuga*, *aletris*, *helonias*, *adonis*, *convallaria*, *nux vomica*, and *ignatia* are all useful, but I have found that *digitalis* and *nux vomica*, or *strophanthus* and *strychnia*, in physiological doses, are best suited to such conditions.

A UNIQUE CASE IN OBSTETRICS.*

BY

W. B. CLARKE, M. D.,
INDIANAPOLIS, IND.

Having been called to attend a woman through a case of childbirth, and made the initial examination, finding that the first stage was only just "on," and being somewhat pressed for the time intervening until close supervision would be more needed, I prepared to depart. A remark was just then made regarding the children in the family, it transpiring that there were four boys. A stranger in the family, I hazarded a remark to the effect that it was now time for a girl, a sentiment that elicited a heartfelt affirmative response. Feeling a little extra sympathetic, I jokingly told the husband and wife that they *might* know the sex before birth, and greatly mystified them by insisting on the great probability that it could really be told, the mystery being intensified by the auscultation examination made. Coming to the conclusion that "it" was probably another boy, and wishing to avoid disappointing the mother with the opinion, I wrote the sex on the wall, requesting no one to look there until after the birth, and left the house, returning in three hours, and finding descent well under way, position the best, and everything favorable, except, perhaps (as afterward shown), that the history of the rupture of the bag of waters was indefinable, to which I attached little importance. The woman was large, healthy, and vigorous, and the expulsion pains were ditto. The head emerged, and then the expulsion process stopped, rotation not occurring. While engaged in cleaning the eyes and mouth of the child I became alarmed because of the absence of signs of life, and impart-

* Read before the Missouri Institute of Homœopathy, Kansas City, April 23, 1891.

ing my fears to the father and professional nurse standing near, made hasty and all legitimate efforts to induce rotation and extract the child. But no pain came until five or six minutes after, when delivery was completed at once (with one pain), and with it came a huge gush of *black* fluid, some expelled with so much force as to strike the footboard of the bedstead. The nurse cried, "The baby will drown!" Taking up the child, and telling the nurse to hold him a moment, I made a crease in the bedclothes and ran the fluid into a slop-jar, and afterward estimated its quantity at about three quarts, exclusive of that absorbed by the bedclothes (and the footboard), which could not have been much; and all of this fluid was *black*—a dark, brownish black. All efforts to resuscitate the child were unavailing, and I had the mournful duty—for the first and last time in my experience—of presenting the parents with a stillborn child. The child was large and perfectly developed as far as could be macroscopically observed, and was alive three hours before the delivery, to show which fact the first part of this paper was so minutely particularized. The cord was congested and very dark for its whole length, but during the birth had not been prolapsed, nor do I suppose that it had become strangulated by pressure *en route*. Another peculiarity was that the whole surface of the child's body (the outer skin) would peel off on the slightest rubbing, and it required the most careful handling to prevent such a result.

My first obstetric case was attended in 1876, but I never saw black amniotic fluid except as described above, and have talked with many who have had a much longer experience but have not seen this phenomenon. I suppose that the amniotic fluid had been made black by the discharge of meconium into it, as I can think of no other possibility. But I am at great loss to account for the death of the child so suddenly, if not unaccountably, and for the easy peeling off of the outer skin. The only satisfaction I had was that the handwriting on the wall happened to be really prophetic or

a lucky guess. Had the child been a female I may not have escaped censure, even if blameless.

Two or three days after this I left the city to attend a medical meeting in another State, returning home the third day, and was at once summoned to the same bedside to battle with a desperate case of puerperal fever, the temperature then being 105°. My plan of attack was to rig up a continuous-stream syringe, and charge it with ice water, and this water was directed into the uterus and kept going. Part of the time the water was charged with mercuric chloride, *à la antiseptique*, and at occasional forced intermissions a small syringe load of hydrogen peroxide was gently put into the uterus and allowed to stay as much as it would. The internal treatment—that is, such as was administered by way of the mouth—was mainly tincture of veratrum viride, in small doses and frequently. In eight hours the temperature was down to 100°, though after a few hours' intermission of the cold water treatment, in my absence, it went up to 104°, but speedily went down by use of the ice water again, and did not come up again, the case speedily progressing to complete recovery, no complication of any kind making its appearance. The cold water caused no sensation of chill, but was peculiarly grateful to the patient.

For the benefit of those—usually the “one solitaire”—who may feel inclined to make the usual medical meeting I-am-holier-than-thou criticism that this was not homœopathic treatment,—that Samuel Christian Frederick Hahnemann never advised or practiced it,—it may be well to append a theory governing this case. You remember that our great master strenuously insisted upon the frequent necessity of removing what he called the *causa occasionalis*. Well, as the tendency of modern thought, in the light of the more recent researches, is strongly toward the acceptance of the doctrine that puerperal fever is simply puerperal septicæmia, produced by the absorption of septic mat-

ter *via* wounds in the genital tract, what is more reasonable to conclude than that if we remove the *causa occasionalis* in cases of such dire need, we prevent their otherwise logical results, desperate sickness and death? Granted that in these cases the poison in the blood is the prime cause of the high temperature and terrible convulsions, we may safely affirm, as above, that the initial absorption of that poison is at the inner surface of the uterus. Many of you have seen the utter powerlessness of drugs, all and singular, in combatting the fearful odds presented in certain of these cases. But what more potent weapons to attack the enemy in its stronghold can be mentioned, than those I have named? A ferret is a no more assiduous and effective rat-hunter than is hydrogen peroxide, a searcher-out and destroyer of pus and septic matter. (I commenced using it in 1884, and cannot get along without it.) The cold water carries off infectious matter, extracts the heat from the tissues, cooling the blood, thus forestalling or preventing the demoralizing brain and spine involvement. While I cannot go so far as to say, as some have, that it is criminal that puerperal fever should ever occur, I believe it fair to say that many cases go on to death that should not have been allowed to. In conclusion, when I lose a case under this treatment it will be time to evolve a better one.

DYSTOCIA; FROM INTRA-UTERINE HYDRO- CEPHALUS.

BY

E. W. BOARDMAN, M. D.,
PARSONS, KAN.

A rare cause of dystocia is intra-uterine hydrocephalus. Madame Lachapelle, in an analysis of 43,555 labors, observed but 15 cases. It is regarded as a serious complication of

labor. Dr. Keiller, of Edinburgh, in collecting 74 cases, found that about 21 per cent. were accompanied by uterine rupture. Other serious consequences are the extreme exhaustion of vital forces from the ineffectual efforts to force the foetal head through the parturient canal, and the traumatic injuries from prolonged pressure upon maternal soft parts. Playfair says, "The diagnosis of intra-uterine hydrocephalus is by no means as easy as the description in obstetric works would lead us to believe." As a matter of fact, the true nature of the case is comparatively rarely discovered before delivery; thus Chaussier found that in more than one-half of the cases he collected, "an erroneous diagnosis had been made." Leavitt says, "Whenever the labor is difficult without other apparent cause than the size of the foetal head, our suspicions should be aroused. These will be strengthened by separation of the parietal bones at the sagittal suture. A positive diagnosis cannot be made without introducing the hand into the vagina and the fingers into the womb."

CASE.—Mrs. Z., aged thirty-eight, large, healthy German woman, mother of ten children. Labors had always been so easy she had never called for professional assistance before this one. When I reached the house she had been having strong expulsive pains for four hours, at intervals of from two to five minutes. Thanks to her vigorous constitution, she was by no means exhausted, though such efforts would have worn out most women. Not at first divining the cause of the obstruction, I ascertained that the os uteri was fully dilated, in fact had disappeared, though the head was at the superior strait. I applied the forceps. The yielding nature of the head and the fact that the forceps slipped off twice aroused my suspicions. According to Leavitt's instructions I introduced my hand into the vagina, and after a careful examination of the presenting part diagnosed the case as hydrocephalus. The bones of the

cranium seemed entirely separated and as if floating on the surface of a sac of fluid.

I explained to the father that it would be necessary to puncture the scalp and let out the serum, which would result in the death of the child. At my suggestion he sent for Dr. Turner, who, upon his arrival, soon satisfied himself with my diagnosis. He attempted to apply the forceps, but not succeeding we decided to puncture the scalp. In the absence of better instruments I wound a scalpel to within half an inch of the point and inserted it along my extended finger. The quantity of serum which rushed out was at least startling, though, we, of course, had no means of estimating it. The cranium collapsed so completely that the forceps could not be used, but conjoined manipulation completed the birth in a short time. The woman was greatly prostrated, and suffered with traumatic fever for several days. The only injury to the soft parts was a paralysis of the sphincter vesicæ, causing dribbling of the urine for several days. Gelsemium and arnica overcame the difficulty and she made a good recovery.

Examination of the foetal head revealed the fact that the brain itself was almost absent, the pressure of the enormous quantity of fluid having evidently prevented its development, or perhaps caused atrophy after a reasonable development. Otherwise the foetus—a male—was well formed.

AN EASY, RAPID, AND EFFECTUAL METHOD OF PERFORMING CIRCUMCISION.*

BY

C. KNOX-SHAW, M. R. C. S.,

Surgeon to the London (Eng.) Homœopathic Hospital.

The method of operation now in vogue at the London Homœopathic Hospital, as experience has shown it, is both

* Read before the London Homœopathic Society.

easy, rapid, and effectual. The operation is not original, but has been modified from a method introduced a short time since by, it is believed, an army surgeon.

The necessity for the operation being decided upon, the child is given a few whiffs of chloroform, and at the same time twelve to fifteen minims of a four per cent. solution of cocaine are injected into the prepuce, about the level of the corona, in two or three places. The object of the chloroform administration, is to quiet the child, and to remove the alarm attendant upon any attempt at an operation. As soon as the cocaine is injected, the chloroform can be withdrawn, as, owing to the injection, the rest of the operation is painless. Lately, in adults, no anæsthetic beyond the cocaine has been employed. While the cocaine is being absorbed, three straight needles are threaded with fine cat-gut, in lengths of about ten to twelve inches. A narrow grooved probe is now oiled and passed through the preputial orifice, between the upper part of the prepuce and the glans penis, until it reaches the fold of mucous membrane at the corona, when the end should be felt in the middle line of the upper surface of the penis. Along this an unthreaded long straight needle is passed and thrust through the skin, one end appearing at the dorsum of the penis, the other protruding from the preputial orifice. A special pair of forceps is now used. These forceps are something like a straight pair of dressing forceps, with somewhat broader and flatter blades than usual, their peculiarity consisting in their blades being fenestrated for nearly the whole length of the gripping part of the forceps. Having drawn the prepuce forward by holding the needle in one hand, the forceps are applied obliquely from above downward, behind the needle, between it and the glans penis. The forceps will have behind them the glans penis, and in front the prepuce included in that part pierced by the needle. The threaded needles are next taken, and one is passed through the center of that part of the skin of the penis that lies in

the fenestrated part of the forceps; the other two needles are put one on each side of the first, but still nearer the middle than the outer edge of the skin. With a sharp knife the foreskin is removed by passing the knife between the forceps and the needle. The forceps are then removed, taking care not to withdraw the sutures at the same time. There will now be three sutures of catgut passing on one side through the skin and mucous membrane across the tip of the glans penis and out on the other side through mucous membrane and skin. Withdrawing the divided skin and mucous membrane, the sutures are picked up by a pair of forceps as they lie on the glans, drawn out a little and divided in the middle; the corresponding parts are then tied. By this means the skin and mucous membrane are sutured together in six places. The operation is completed by seeing that the mucous membrane can be thoroughly retracted beyond the corona. Occasionally the mucous membrane is not quite divided freely enough by the knife, but this can easily be remedied by a small snip with a pair of scissors.

No dressing is required to be applied—it causes much less subsequent pain to the patient to have none at all; the parts are simply dusted with iodoform. The after-treatment consists of a warm carbolic or calendula sitz bath, night and morning.

AFTER-PAINS.

BY

D. N. RÂY, M. D.,
CALCUTTA, INDIA.

CASE I.—Mrs. P., aged twenty-eight, a healthy lady, became pregnant for the fourth time, six years after the birth of her last child. At 9 A. M. on March 3, 1889, she gave birth to a healthy, stout child, weighing about thirteen pounds.

The labor was rather tedious and the bleeding was somewhat more than usual. As I was present at the time I examined the placenta, which came out of itself, and found it was entire. After the expulsion of the placenta the lady began to complain of a severe pain on the right side of her abdomen, and with it there was thirst. The pain was more or less continuous, but at times paroxysmal, when it would become unbearable. The pressure used to relieve the pain. She began to beg me for some medicine to relieve her pain, so that she might have a sound sleep at night. For an hour or so I did not give her any medicine, but the pain began to increase, so I dissolved xanthoxylum, three drops in two ounces of water, and gave one spoonful every half-hour. After the third dose the pain subsided and she slept fairly at night. She again had slight pain the next morning. A couple of doses of the same medicine were given. The pain was relieved and she got on well.

CASE II.—Mrs. B., aged thirty-nine, a thin, delicate lady, mother of eight children, gave birth to a healthy child, at her full term, on the morning of the 7th of July, 1889. The labor was quite easy and natural. It was usual with her that she suffered from severe *after-pains* for four or five days after the birth of every child. The pain used to be so severe that she had a regular horror of it. She was given *cimicifuga* race. and *caulophyllum* for two days, and with them hot fomentation was continued. This latter gave her temporary relief. On the third day, that is, on the 9th of July, I was called to see her. The pains were almost incessant and were very severe at each paroxysm, during which she would toss about in bed. She was so hopeless about the relief of that pain that on my arrival there she said, "she was doomed to suffer, and nothing would relieve her of the pains." The pain was all over her abdomen. On inquiry I found the discharge was normal in every respect and the placenta came out entire; in fact, she would feel all right if the pains were relieved. I could not get any

clew to prescribe on, but only on supposition that the pains were neuralgic in character, I gave her xanthoxylum gtt. v, aqua pura $\frac{3}{4}$ ii, one spoonful every fifteen minutes for two doses, and then every half-hour for two more doses, and hourly afterward. It was to my and her surprise that she was relieved of the pain after the fourth dose and fell asleep. She slept for some hours for the first time after her delivery. She had a slight pain in the afternoon, the medicine was repeated twice at an hour's interval. The pain was relieved and did not recur.

THE FŒTAL APPENDAGES.

BY

DR. A. AUVARD,
PARIS, FRANCE.

1. *Extra-embryonic portion of the ovum.—Membranes.—Placenta.—Amniotic liquor.*—The extra-embryonic part of the ovum is composed, as we have seen in Fig. 380, by the extra-embryonic somatopleure and splanchnopleure, separated by a virtual space called the external cœlom (the internal cœlom is an analogous space found at the embryonic part). The real cavity constituted by the extra-embryonic splanchnopleure is called the umbilical vesicle, and contains the elements of the nutrition of the ovum until the formation of the placenta. This umbilical vesicle corresponds, as to its contents, to the yolk of the eggs of birds. While the wall of the umbilical vesicle, formed by the splanchnopleure, undergoes an atrophy and a progressive

* From Dr. Auvard's admirable work on Obstetrics we have translated from the French two closely connected portions, the first relating to the formation of the placenta; the second treating very clearly some questions concerning the third stage of labor.

retreat, the suprajacent layer, on the contrary, which is only the extra-embryonic somatopleure, takes on a considerable and rapid development to constitute the secondary chorion and the amnion. The layer of the somatopleure is seen to

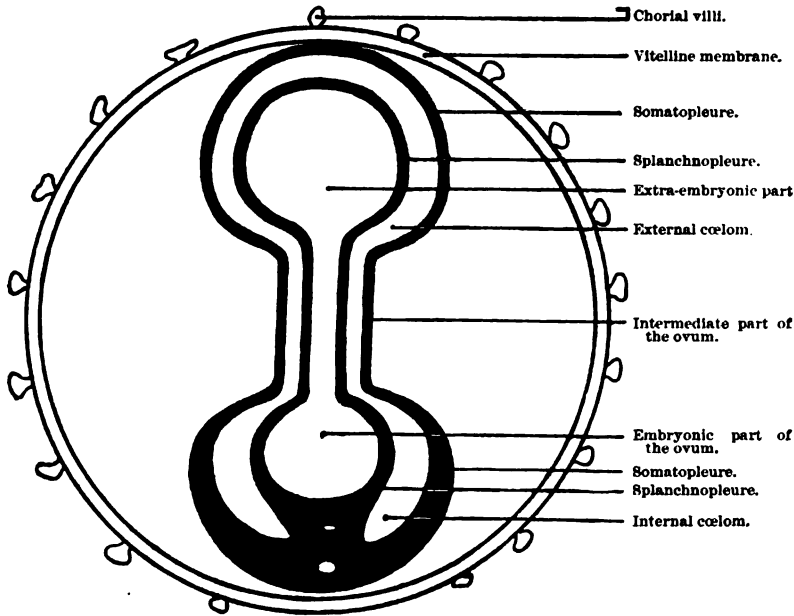


Fig. 380.—Strangulation of the Ovum.

throw out a series of prolongations, indicated by the successive tracings 1, 2, 3, 4 (Fig. 381). These prolongations meet one another by surrounding the ovule; their reunion quickly occurs at a point opposite to their origin. When this reunion is achieved (Fig. 382), of the two layers created by this prolongation, one is directly applied to the internal surface of the vitelline membrane over all its extent; the other, continuing with the intermediate somatopleure, lines a part of the external surface of the umbilical and of the internal surface of the preceding layer; between them and the embryo exists an actual cavity in which is collected the amniotic fluid.

The primary chorion is formed by the vitelline membrane, covered at a certain moment by villi at its surface. The secondary chorion is created by the addition of the layer of the extra-embryonic somatopleure to the vitelline mem-

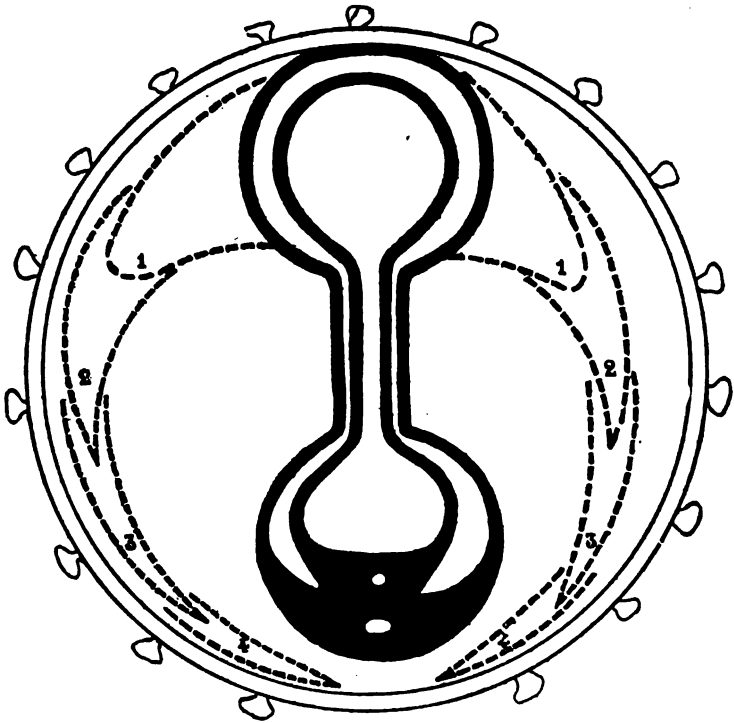


Fig. 381.—Prolongations of the Extra-embryonic Somatopleure.

brane. These two membranes undergo a true fusion to form the secondary chorion. The membrane which in Fig. 382 is found under the secondary chorion, is the amnion. In the space which separates them is developed the definitive chorion, as we shall see.

From the embryo, between the somatopleure and the splanchnopleure, in the pelvic region, is developed a hollow bud, which progressively enlarges, separating the two limit-

ing membranes; this is the allantois. Its embryonic part becomes the bladder and the urachus, and its extra-embryonic part forms the third chorion (or definitive) and the placenta. Fig. 383 shows the first steps of the develop-

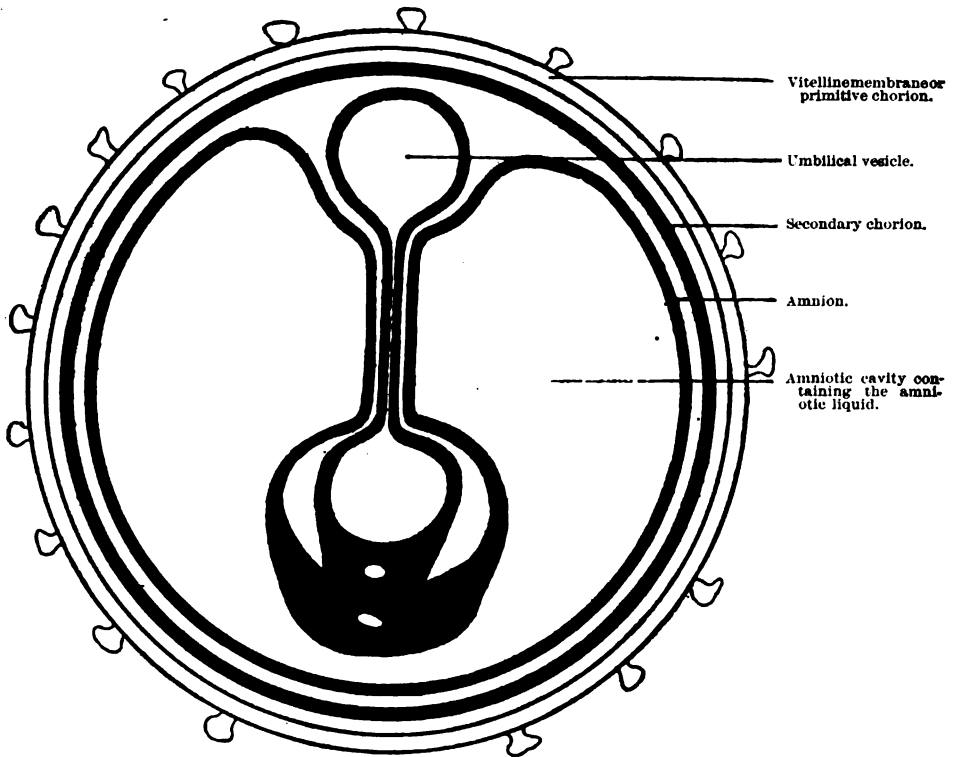


Fig. 382.—Formation of the Amnion and Secondary Chorion.

ment of the allantois. Fig. 384 defines a more advanced stage. The allantois progressively invades the space which separates the secondary chorion from the amnion. It may be compared to an umbrella, the handle forming the cord, and the spread portion extending more and more to envelop

the embryo, as in 1, 2, 3, 4 (Fig 384). We are now at about the twenty-fifth day consecutive to fecundation.

At the end of the first month the allantois is at the height of its development. It has carried with it, over all

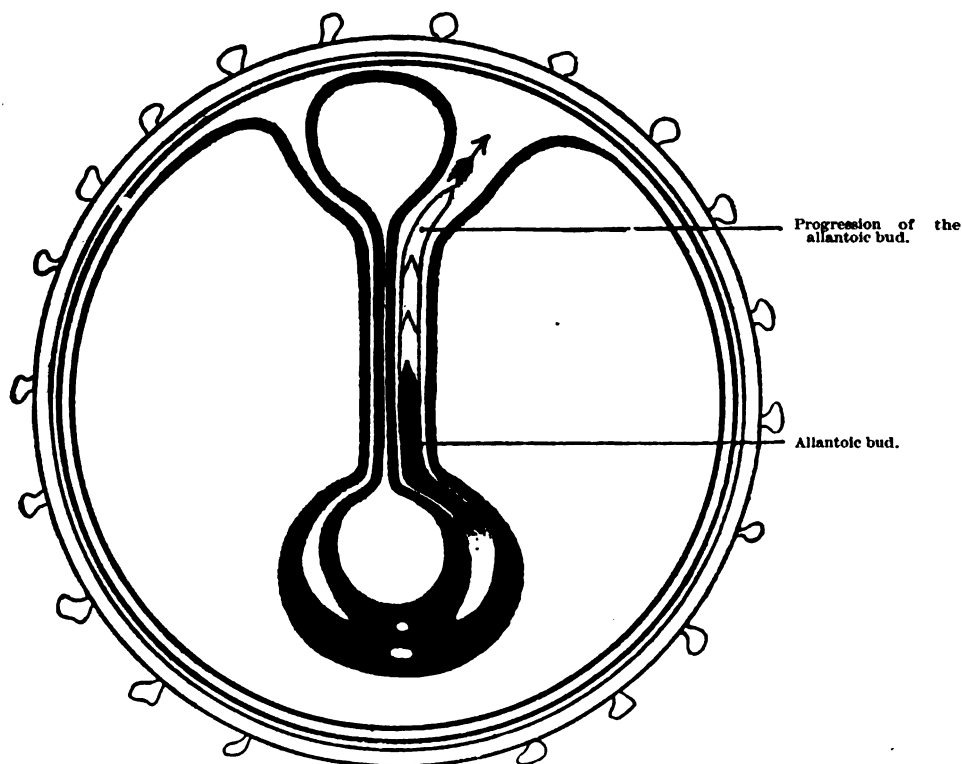


Fig. 383.—Formation of the Allantoic Bud.

the internal surface of the secondary chorion, vascular ramifications, which are prolonged into villi. The umbilical vesicle, from the absorption of its contents for the development of the ovule, progressively atrophies.

During all the second month the enveloping membranes change but little. They undergo a development as a whole.

All their surface is covered by vascular villi, so that the shaggy ends of these structures can be easily seen by floating the ovum in water.

During the third month, the villi which cover the surface of the ovum atrophy, except at the point where the ovum

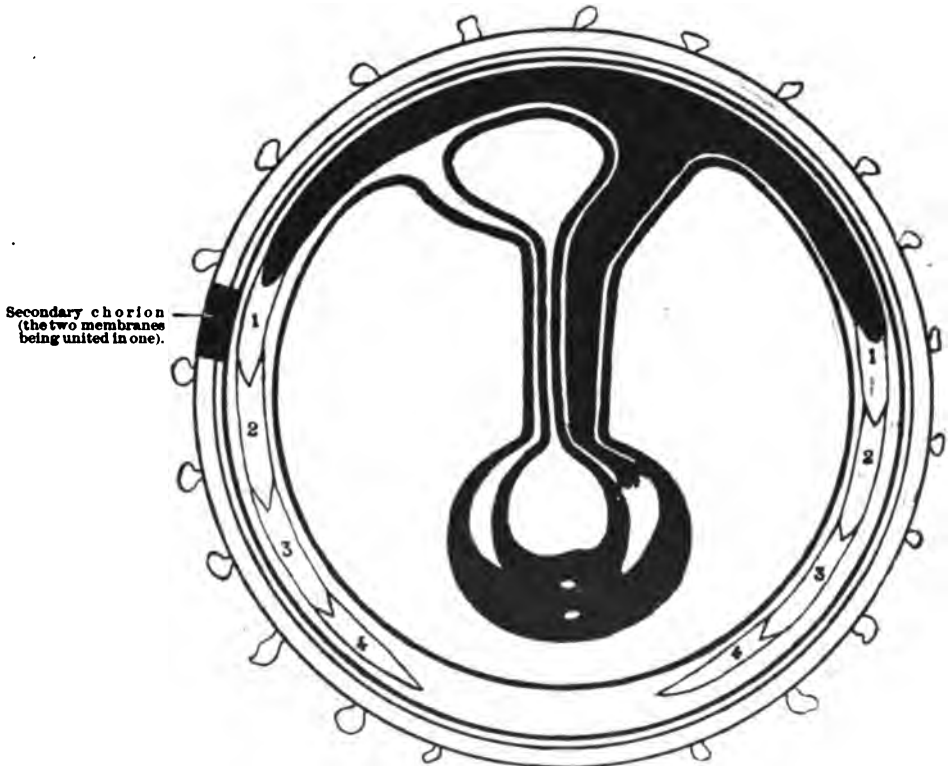


Fig. 384.—Development of the Allantois.

adheres to the uterus, and where they take on a remarkable development. This hypertrophied region, where all the life of the allantois seems localized, becomes the placenta. Over all the rest of its extent the allantois atrophies, as indicated in Fig. 385.

Outside the placental zone the allantois is entirely united to the secondary chorion, as indicated in a limited region of Fig. 385. Thus is formed the tertiary or definitive chorion. Thus it is seen that the primary chorion is formed by

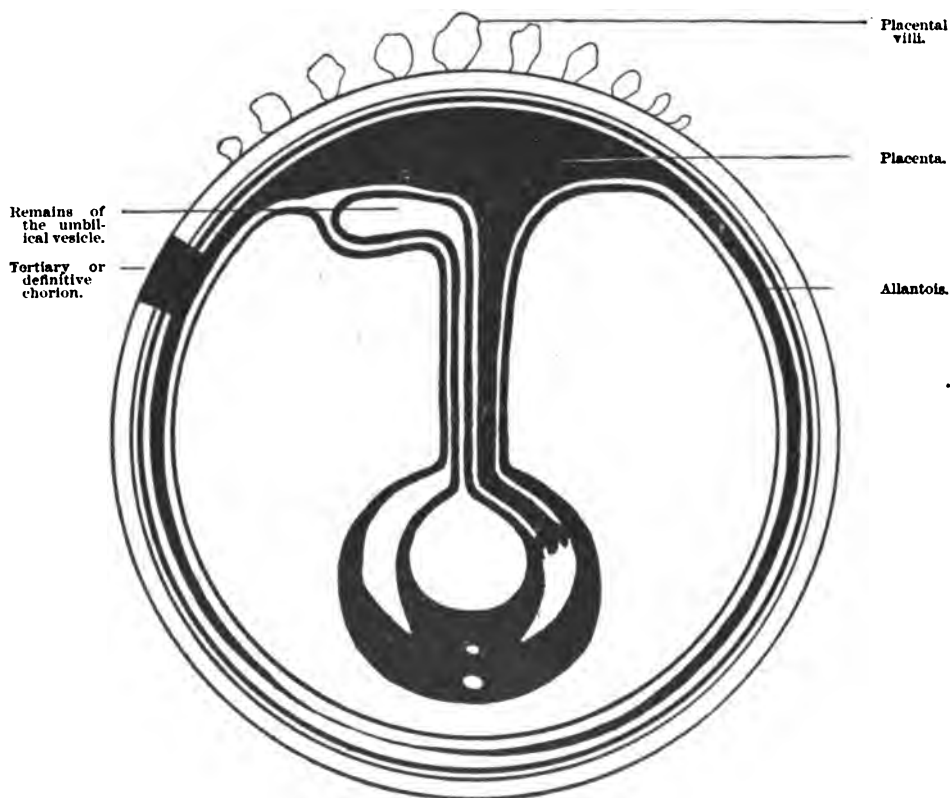


Fig. 385.—Formation of the Placenta and Tertiary or Definitive Chorion.

the vitelline membrane, the secondary by the extra-embryonic somatopleure, the tertiary by the allantois.

The umbilical vesicle continues to atrophy. This atrophy is complete at the end of the third month, and at this moment nutrition by the placenta is definitely substi-

tuted. Consequently, at this time, the embryo becomes the fœtus; that is, at the end of the third month, or at the commencement of the fourth, the reign of the allantois, of

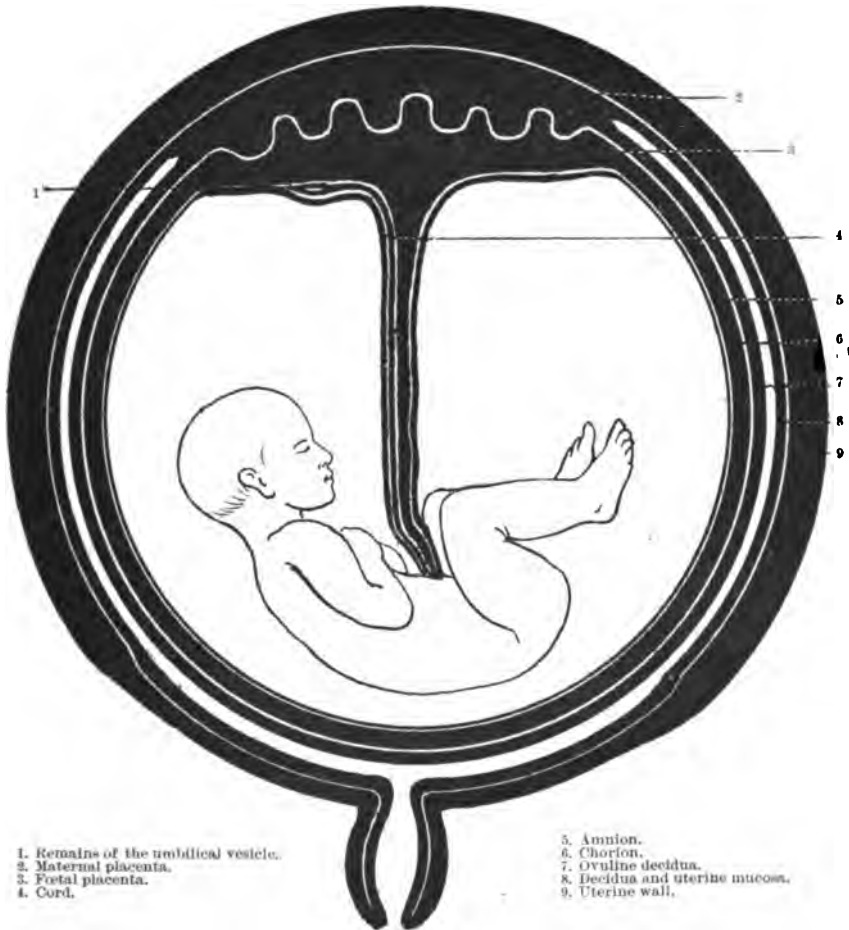


Fig. 386.—Ovum Definitely Formed.

the placenta, replaces that of the umbilical vesicle. This vesicle atrophies so completely that it is difficult to find traces of it on the ovum at term.

The ovum during the evolution that we have now to follow is inclosed and protected by the uterine mucosa, which takes a special evolution, transforming it into a new membrane called the decidua, thus designated because it is destined to be cast off at the same time with the ovum.

The preceding description has given us a summary of the formation of the placenta, of the chorion, of the amnion, of the decidua, and of the amniotic fluid; we have now to study the details which will initiate us more intimately into the constitution of these different parts, by taking as a type the ovum nearly arrived at term. But before beginning this detailed description it is indispensable to embrace at a glance the general configuration of the ovum, inclosed by the uterus. The schematic section represented by Fig. 386 permits us to easily grasp this as a whole.

Here there is seen in passing from the foetus to the uterus:

1. The uterine wall, thin in the inferior segment at the cervix.

2. The uterine mucosa (partially transformed into the decidua), considerably thickened at the placenta and divided in the rest of its extent into the layers, one applied directly on the ovum (ovaline decidua), the other on the contour of the uterus (uterine decidua), is continuous inferiorly with the cervical mucosa. We shall study later the mechanism of the formation of these membranes.

3. The chorion, considerably hypertrophied in one region to constitute the placenta, and atrophied, on the contrary, in the rest of its extent, where it is inclosed between the ovaline decidua and the amnion.

4. The amnion, which is the most internal membrane.

5. The amniotic fluid, which fills the cavity of the amnion, and in which floats the foetus, connected to the placenta by the cord.

We shall study these different parts in the following

order: 1. Placenta. 2. Chorion. 3. Amnion. 4. Decidual membranes. 5. Liquor amnii.

I. PLACENTA.—The placenta, forming the union between the maternal and fœtal circulations, is a fleshy and vascular disc, terminating by one of its surfaces in the cord, the other adhering to the internal wall of the uterus. Its weight is about 500 grammes, nearly that of the liquor amnii, so that the fœtal appendages represent approximately a kilo-

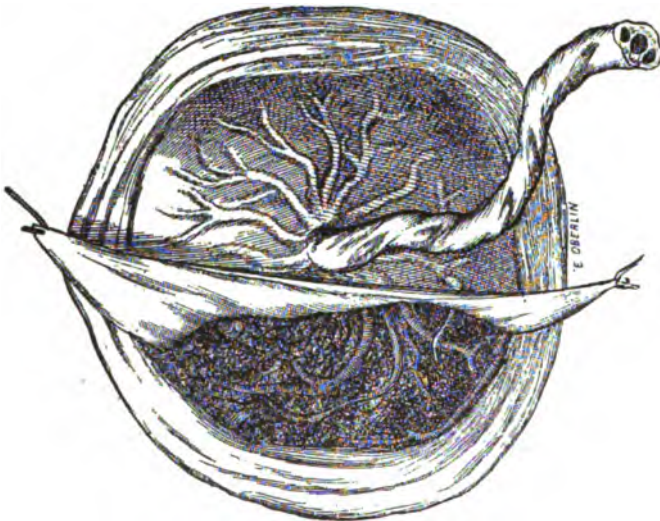


Fig. 387.—Fœtal Surface of the Placenta with Amnion partly Uplifted.

gramme. Dimensions: 20 centimeters in diameter or a little less; 3 centimeters in thickness toward the center, progressively thin toward the edge. To understand this organ completely it is necessary to study: 1. Its fœtal surface. 2. Its uterine surface. 3. Its circumference. 4. Its structure. 5. Its physiology.

1. The fœtal surface (Fig. 387), in contact with the liquor amnii, is smooth in all its extent, for it is covered by the amnion, which can easily be detached. It is grooved by

the vessels formed by the expansion of funicular arteries and veins.

The insertion of the cord may occur in four different regions (Fig. 388):

1. At the center of the placenta—central insertion.
2. Between the center and the periphery—lateral insertion.
3. At the margin of the placenta—marginal insertion.
4. On the membranes—velamentous insertion.

Their relative frequency is as follows :

Central and lateral insertion (equally frequent)	95	per	100
Marginal insertion.....	4	"	"
Velamentous insertion.....	1	"	"

In cases of velamentous insertion, which may occur up to 20 centimeters from the placental margin, the vessels may ramify in the membranes (Benckiser), or, on the contrary,

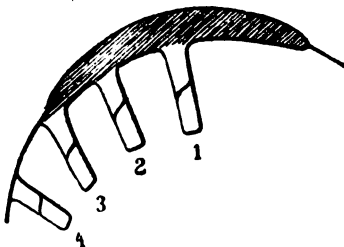


Fig. 388.

they may pursue isolated courses up to the placenta before dividing. (Lobstein.)

2. The *uterine surface* (Fig. 389) is unequally projecting and flocculent, divided into lobes or cotyledons by a number of more or less marked grooves. These lobes, to the number of 10, 14, or more, are divided into lobules, which are composed by a grouping of villi. It is by this surface that the placenta is inserted on the uterus. To state this insertion exactly, it is important to divide the internal surface of the uterus by two parallel planes AB. CD (Fig. 390), passing

one at eight centimeters below the fundus of the uterus, the other at eight centimeters from the internal orifice. Accord-

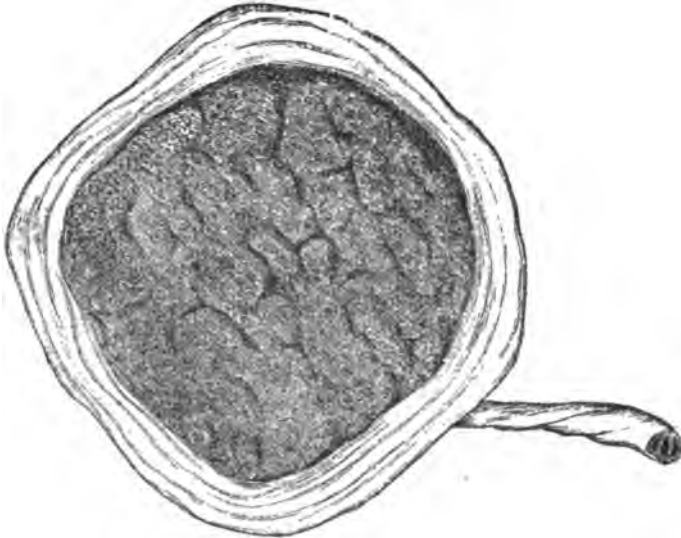


Fig. 389.—Uterine Surface of the Placenta.

ing to a series of measurements that I have made, it results that the distance which separates the two planes AB and

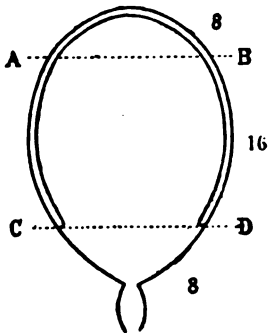


Fig. 390.



Fig. 391.

CD, by following the uterine wall, is about 16 centimeters. Every placenta which by any part of its surface is in-



Fig. 392.



Fig. 393.

serted below the plane CD, that is to say which encroaches on the uterine circle blended with the plane CD, is an inferior polar placenta or *placenta prævia*.

Likewise, every placenta which by any portion of its ex-

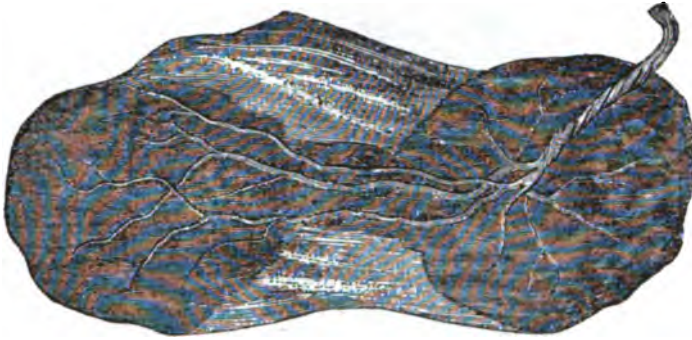


Fig. 394.

tent is inserted above the plane AB, is a superior polar placenta.

Every placenta inserted between these two planes may



Fig. 395.

be called equatorial, for its center coincides with the equator of the uterus, but this variety is rare, the diameter of the

placenta being usually greater than 16 centimeters and thus encroaching on one of the polar circles.



Fig. 396.

From the statistics of 48 cases I have found :

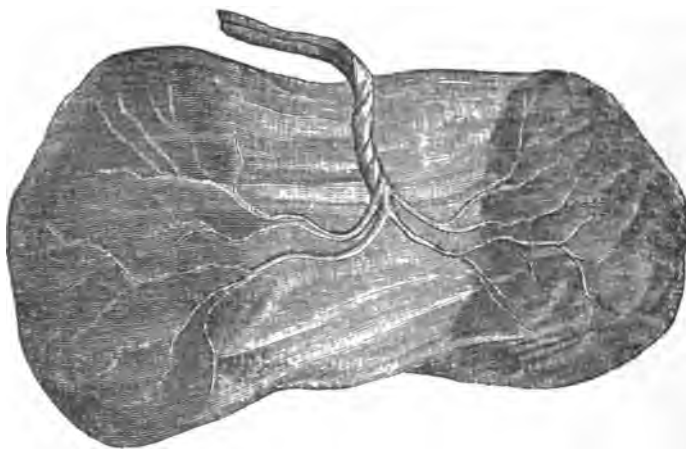


Fig. 397.

Inferior polar placenta in one-third of the cases.

Superior polar placenta in two-thirds of the cases.

Equatorial placenta, exceptionally.

The inferior polar placenta or placenta prævia gives rise to a series of accidents which will be studied later.

3. The circumference of the placenta is constituted by the union of the membranes with this organ. This placental margin, regular in a rounded or oval placenta, becomes more or less tortuous when the form departs from

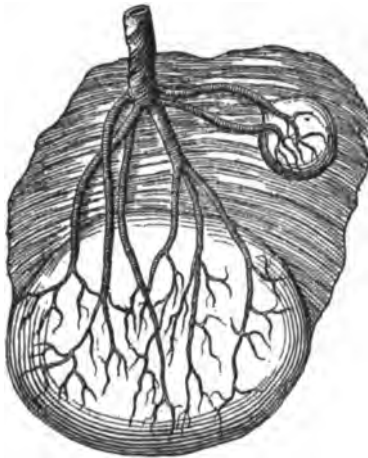


Fig. 398.

the normal type. Thus we are led to say a few words on the different forms of placenta in simple pregnancy:

a. Sometimes the placenta is unilobed, the most frequent form.

b. Sometimes it is multilobed, but not having the lobes entirely separated.

c. Sometimes it is multilobed, with the lobes so distinct that there appear to be several placentas. As examples of these varieties we have under:

A. Unilobed placenta. 1. Circular form (Fig. 391). 2. Oval form (Fig. 392). 3. Irregular form (Fig. 393).

B. United multilobed placenta. 1. Two equal lobes (Fig.

394). 2. Two unequal lobes (Fig. 395). 3. There exist more than two lobes (Fig. 396).

C. *Placenta with separate lobes.* (a) Two equal lobes (Fig.

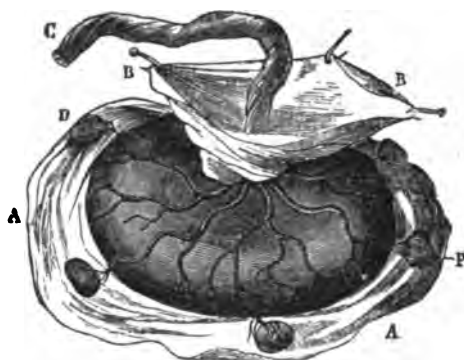


Fig. 399.

397). (b) Two unequal lobes (Fig. 398). (c) More than two lobes (Fig. 399).

THIRD STAGE OF ACCOUCHEMENT.—DELIVERY OF THE APPENDAGES.

Delivery of the foetal appendages may be normal (physiological) or abnormal (pathological). These terms define themselves. I shall only study here the physiological delivery, the pathological being reserved for later discussion. In the point of view of intervention delivery is called :

Spontaneous or natural, when it is left to the forces of nature alone.

Favored, when, by expression or by traction, the exit of the appendages is aided.

Artificial, when, to obtain the appendages, it is necessary to introduce the hand or instruments into the uterine cavity.

A. MECHANISM.—Delivery takes place in three stages :

First Stage.—Detachment of the appendages.—The placenta, detached by a mechanism to be studied later, falls on

the uterine circle, which at this moment represents the internal orifice of the uterus.

Second Stage.—Uterine Expulsion.—The placenta is expelled from the uterine cavity into the vagina by passing through the portion extending from the uterine circle to the external orifice, representing the engagement of the placenta.

Third Stage.—Vaginal Expulsion.—The placenta is

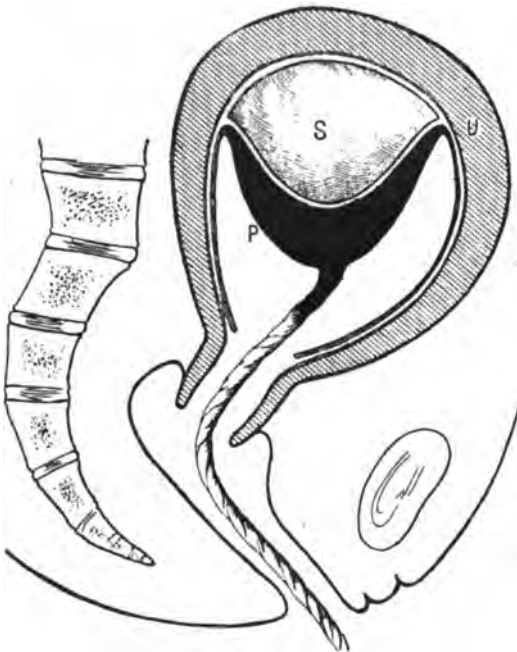


Fig. 639.—Delivery. 1st Stage. Theory of Baudelocque.
S. Blood. U. Uterus. P. Placenta.

pushed out of the vagina through the vulvar orifice, representing disengagement of the placenta.

First Stage.—Detachment of the Placenta.—Two theories have been advanced to explain this detachment :

a. Detachment by effusion of blood (Baudelocque).—The blood, breaking up the attachments uniting the placenta to

the uterus, is effused between these two organs, and, its quantity progressively increasing, it mechanically separates the placenta and the membranes from the uterus (Fig. 639). In this theory the uterine muscular structure plays an almost passive part.

b. Muscular theory (Matthews Duncan).—Contrary to the preceding theory, the muscular structure here plays the

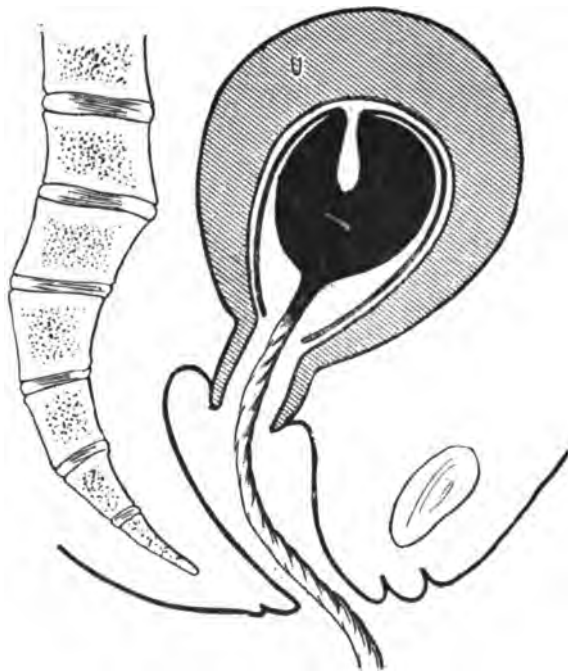


Fig. 640.—Delivery. 1st Stage. Theory of Matthews Duncan.
U. Uterus.

principal rôle ; it is the retraction and the contraction of the organ, which, progressively diminishing the uterine cavity, pushes the placenta outward. Effusion of blood may exist, but it plays only a secondary rôle. According to Baude-locque, the hæmorrhage is inevitable and indispensable ; according to Duncan, it is accessory and may be absent (Fig. 640).

If Baudelocque's theory were exact, it should apply to all cases. But it cannot be accepted in placenta prævia, and besides the hæmorrhage of delivery is so slight that it could not be called upon to explain the placental detachment. On the contrary, Duncan's theory presents no exceptions and should be considered as well founded. It is the action of

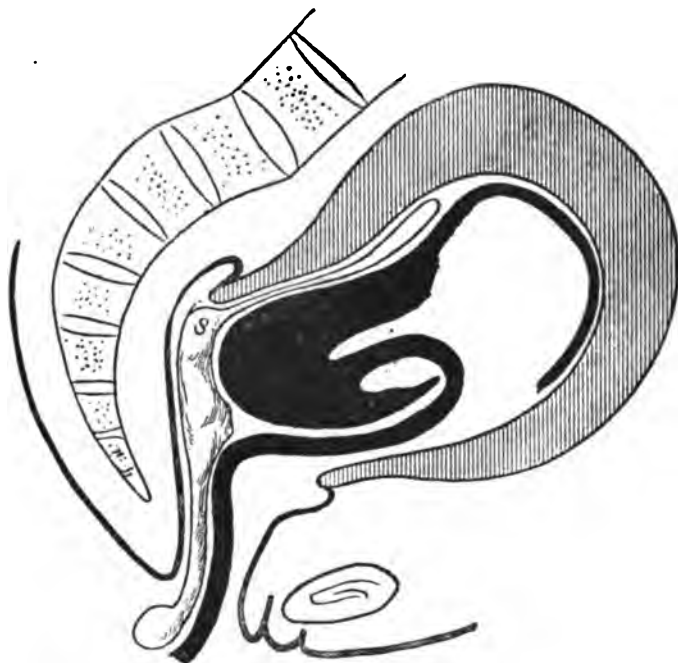


Fig. 641.—Delivery. 2d Stage. Presentation of the Uterine Face.

the uterine muscular structure which causes the detachment of the placenta and of the membranes.

Second Stage.—Uterine Expulsion.—The detached placenta falls on the uterine circle, where it may present in three different ways: by its uterine surface, by its edge, or by its fœtal surface. Presentation of the uterine surface (Fig. 641) takes place in about five cases out of one hundred. The placenta covers the uterine circle as if it had

been originally inserted on the contour of this orifice. This presentation is the most rare and can be considered as pathological. It is usually due to a vicious insertion of the placenta or to partial adhesions of the placenta or of the membranes.

Marginal presentation (Fig. 642) takes place in about



Fig. 642.—Delivery. 2d Stage. Marginal Presentation.
U. Uterus. S. Blood. P. Placenta.

twenty cases out of one hundred. It is the edge of the placenta which engages in the uterine circle, and which arrives first in the vagina. The causes are analogous to those of presentation of the uterine surface.

Presentation of the foetal surface (Fig. 643) occurs in seventy-five cases out of one hundred. This presentation of the placenta should be considered as the rule, or rather

as physiological, the others being pathological. It is to the placenta what the vertex presentation is to the fœtus.

The general disposition of the placenta is that of a cup, which is adapted to the uterus, to the contour of the uterine circle, and which is continued by the cord through the vagina and vulva to the exterior. The placenta, pushed by

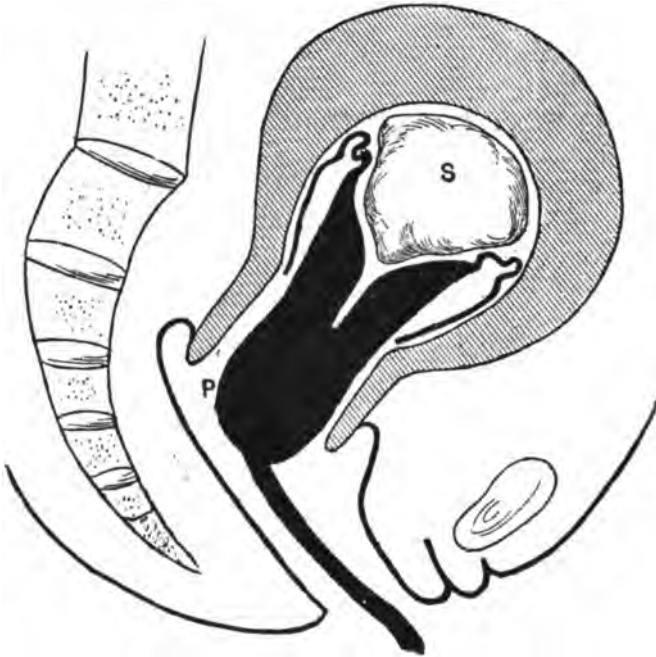


Fig. 643.—Delivery. 2d Stage. Presentation of the Fœtal Face.
S. Blood. P. Placenta.

uterine retraction and contraction, opens the uterine circle little by little and also the canal which follows it, drawing down the membranes, which turn around it in proportion to its descent. Traction on the cord and expression complete the detachment of the membranes, commenced by uterine contractions. Matthews Duncan believes that the uterine canal should present a diameter of about five centimeters to allow the passage of the placenta.

Third stage—Vaginal expulsion.—When the placenta has fallen into the vagina completely, the woman feels a vague need of pushing. Under the influence of some efforts of expulsion the placenta progresses toward the vulva, appears at this orifice, and finally passes it, drawing in its train the membranes. As at the uterine orifice, the placenta may present by its uterine or its foetal surface, or by its edge. In general the presentation is the same at both orifices, unless changed by interventions, such as tractions on the cord. When the placenta presents at the vulvar orifice by its foetal surface, the membranes are inverted and the ovum offers an inverse disposition to that which existed in the uterine cavity. When, on the contrary, there is a marginal presentation or a presentation of the uterine surface, the membranes are not inverted and preserve their primitive disposition.

B. SYMPTOMS AND DIAGNOSIS.—To recognize the different stages of the delivery, either touch or vision may be used, following the descent of the cord. Three circumstances may present :

1. The exploring finger meets the placenta in the vagina. The second stage is terminated and the third is in progress.
2. The placenta is at the level of the uterine circle, or engaged in the canal which follows it. The first stage is accomplished and the second stage is in progress.
3. The finger, as far as it can reach along the cord cannot feel the placental mass. Detachment has not taken place and the first stage is in progress.

Digital examination, then, gives exact information, but it presents a double inconvenience, the first, of being painful, and the second of exposing to septicæmia. Thus it is better, except in necessity, to be content with examination of the cord.

Examination of the cord.—At the same time that a ligature is placed on the cord near the umbilicus a second one should be placed at the vulva, as a funicular index, permitting the

descent of the placenta to be followed. When this index is at seven fingers' breadths below the vulva, the placenta is, in general, at the uterine circle and even engaged in that orifice. When it is still farther from the vulva, the placenta is in the vagina, the second stage is accomplished, and the woman feels at this moment a local *malaise*, which excites bearing-down.

By this means one can, without digital examination, diagnosticate with a sufficient precision the descent of the placenta. Touch should only be resorted to when the delivery of the placenta does not occur at the end of an hour after accouchement, for then a pathological state is entered and the physician is authorized to seek the cause of this delay.

Duration.—Physiological delivery of the placenta lasts from some minutes to an hour, an average of half an hour. A delivery lasting more than an hour is pathological.

C. MANAGEMENT OF DELIVERY OF THE APPENDAGES.—Four methods: Expectation. Traction. Expression. Mixed method.

Method of expectation.—To leave nature to act, when all is physiological, is a counsel seductive in appearance. But is it so in practice? Must the physician wait near his patient several hours until delivery is terminated? The interest of the women above all is responded. But the interest of the women is not in our waiting. It is bad practice, on the contrary, not to deliver a patient as soon as possible, to be enabled to change her, to give her dry clothes, and to permit repose. Thus, simple expectation is in general abandoned and has few chances of making new proselytes.

Method of traction.—The principle of this method consists in aiding the exit of the ovuline appendages by tractions exerted on the cord (Fig. 644). The third stage is the moment of choice for this traction. The cord should be seized with a dry cloth and drawn gently outward. When

the placenta opens the vulvar orifice it is grasped with the free hand and carefully delivered with the membranes.

Method of expression.—To replace the *vis à fronte* by the *vis à tergo* has been the idea from which this arose. In the place of drawing, it is thought preferable to push (Fig. 645). Credé's name is generally attached to this method. The

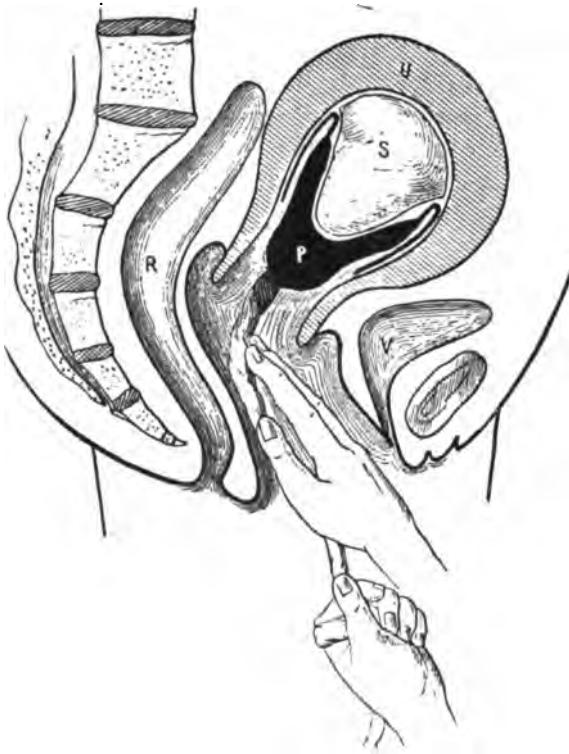


Fig. 644.—Delivery by Traction.

U. Uterus. S. Blood. P. Placenta. R. Rectum. V. Bladder.

cord is no longer to be touched. After the exit of the foetus, almost at once (Winckel), or at the end of a certain time, when uterine contractions return (Breisky), the uterus is grasped with the whole hand and squeezed like a sponge. By this expression uterine retraction and contraction are

aided, diminishing the capacity of the uterus and obliging the contents to escape. Pressure on the hypogastrium, combined with that on the uterus, is sufficient to favor evacuation of the vagina.

Mixed method.—It is to this method that I give the preference, for it unites the advantages of expression and of

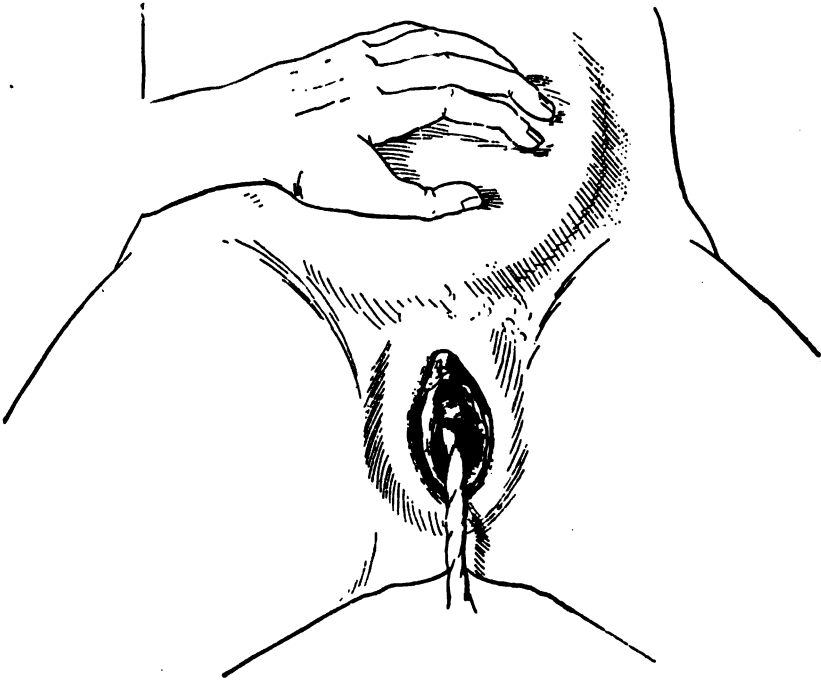


Fig. 645.—Delivery by Expression.

traction (Fig. 646). This method should be practiced as follows: During the first stage of delivery, while the funicular ligature has not descended to seven fingers' breadth below the vulvar orifice, it is sufficient to place one hand on the fundus of the uterus to assure the progressive retraction of the organ and to aid it by slight frictions. When the first stage is terminated, after having grasped the cord with

one hand, make gentle tractions in the direction of the perineum, while the other hand expresses the uterus through the abdominal wall. This intervention should always be practiced with slowness and gentleness. It lasts some minutes, a quarter of an hour, sometimes half an hour or more.

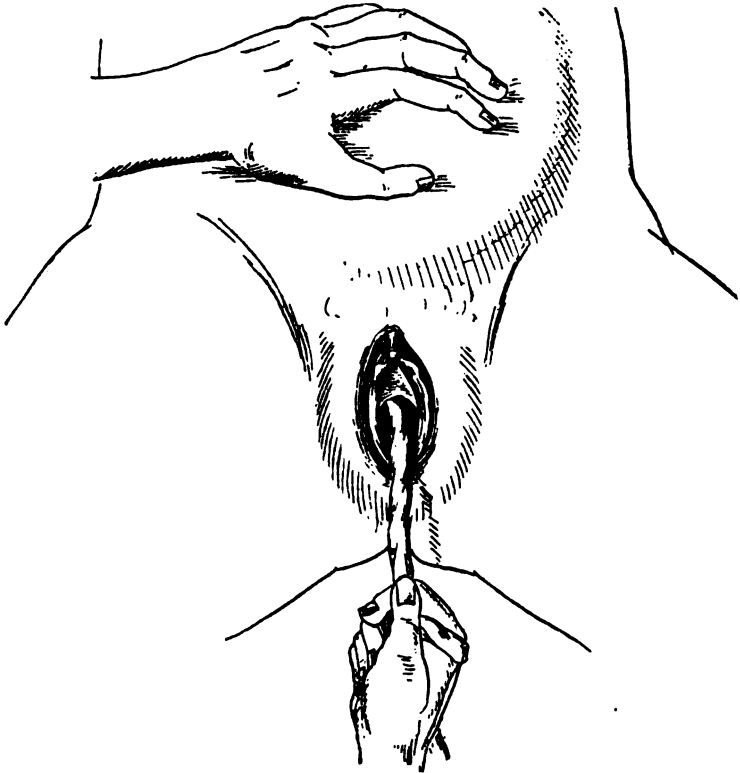


Fig. 646.—Delivery by Mixed Method.

The accoucheur should not forget that he is only to second uterine action. During the third stage the uterine expression is continued, but moderated, less in the aim of aiding the delivery than in that of preventing uterine inertia and hæmorrhage. With the other hand the placenta is drawn on by the aid of the cord. When the placenta makes its

exit, it is left to lie in the bed or in a receptacle placed at the vulva to receive it. One hand is still retained on the abdomen while the other draws the membranes progressively outward; the exit of the membranes should be particularly slow, for the least impatience at this moment is sufficient to cause their rupture and to favor retention.

After delivery, it is well to leave the hand on the fundus of the uterus for a quarter of an hour, making slight friction from time to time, in the aim of watching retraction and of preventing inertia.

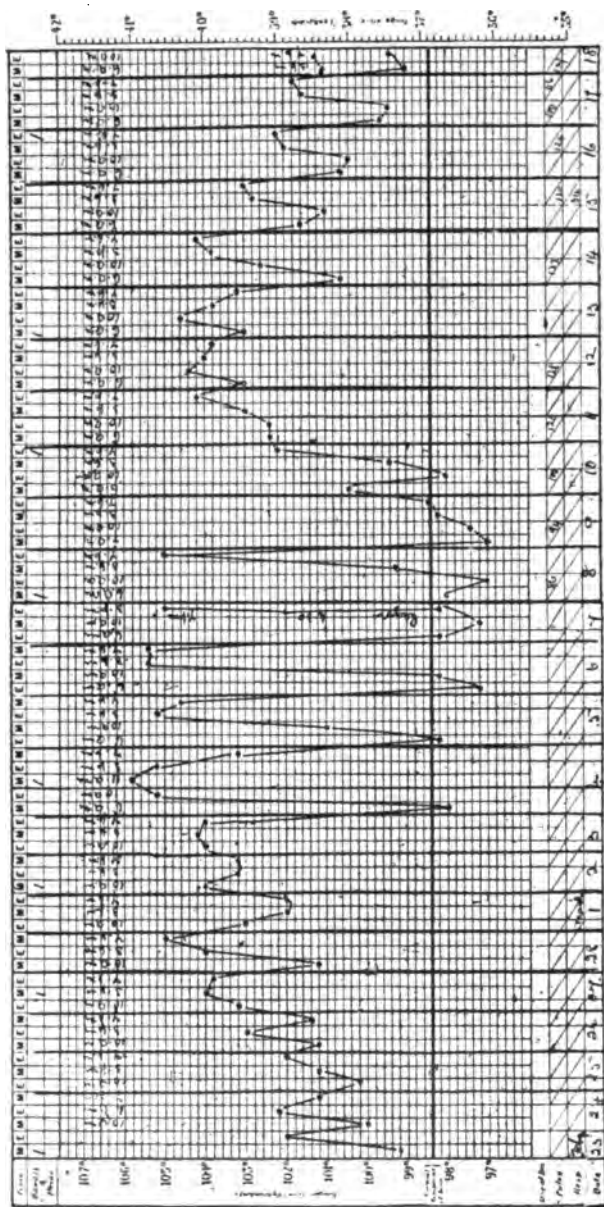
A COMPLICATED OBSTETRICAL CASE.

BY

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As a specimen of an interesting temperature chart in a puerperal case, I think the accompanying is worth noticing. The patient was a primipara, aged thirty-eight; parturition took place on February 22, 1889. When summoned, the case was found to be one of prolapsus funis, with jammed right shoulder, the right hand appearing at the vulva. The patient was put under chloroform by Dr. Capper. After two hours' hard work (owing to the narrowness of the pelvic inlet), Dr. Hawkes and myself succeeded in turning and delivering the body, and after a quarter of an hour longer—by means of a blunt hook in the mouth—the head was extracted. The child, of course, was dead before we commenced operations. There was not much loss of blood, and patient was comfortable on the evening of that day. Next morning (23d) the temperature was 99.2, and from this point to the end of the case the temperature may be followed on the chart.

There was no sign of septic absorption, the discharge, although scanty, being sweet throughout. The uterus was



washed out several times during the first fortnight with very weak corrosive sublimate lotion. There was no tenderness over the uterus, and no trouble with the breasts.

Severe headache was present on the 28th, and continued for about a week, but nothing to account for the temperature could be found until, on March 12, right-sided pleuropneumonia was developed with very severe pain, causing shouting at each breath. This went on well, and she was much better by the 22d, when she complained of pain in the left leg and phlegmasia dolens occurred, the leg swelling considerably and the pain being severe. With treatment this condition also improved, and the patient was dismissed on April 29, with the lung and leg recovered and a sense of weakness from the severe illness alone remaining.

It was an extremely anxious case, and Dr. Hawkes (who watched the case all through with me) and I were very gratified at the successful result. I do not remember having heard of any case with such severe complications ending so satisfactorily. Since writing the above notes I have heard that the patient, who has gone abroad, wrote to the nurse who had charge of her in the Hahnemann Hospital (which she entered as a private patient), saying that she had completely recovered, and was quite strong again.

Outline of Treatment.—When pyrexia first manifested itself veratrum viride was administered. Distressing head symptoms occurring, and no local cause for these or for the pyrexia being found, lachesis was given, and also cannabis indica, but the relief was not complete. On the 5th, when the temperature was 105.2° F., baptisia 1X was given. On the 6th, chininum sulph. 1X was given, and on the 7th this was changed to gelsemium ϕ . On the 11th, arsenicum; and when the stitching pains occurred on the 21st, bryonia and poultices were used.

On the 13th, bryonia and phosphorus were given in alternation, and continued until the 25th, when sulphur was administered instead.

On the development of phlegmasia, pulsatilla was resorted to, and when, on the 26th, the leg was easier, and there was still a little pain in the side, sulphur was repeated. On April 5, apis 3 was given, and under this medicine the leg improved very satisfactorily.

DRY HEAT IN UTERINE DISORDERS.*

BY

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Several years ago my attention was directed to the advantages of dry heat in rectal disorders, and, reasoning from analogy, I could not see why the same results could not be obtained, if applied in a practical manner, to other disorders within the pelvis. The benefit to be derived from the use of heat, either dry or moist, in the treatment of diseases of the uterus, has long been known. Owing to the great sensitiveness of the uterus, and its peculiar formation, the practice of injecting hot water into its cavity has been almost entirely abandoned. In order to obtain the advantages of the use of heat, and yet avoid the deleterious effects of methods of treatment in which this agent was employed, it occurred to me that the object might be best attained by means of dry heat. Accordingly, I had constructed certain instruments which would convey heat directly to the interior of the uterus and the bladder. In my hands they have proved to be perfectly adapted to the purpose desired. It was suggested to my mind by having seen an instrument which was used by Drs. Hamilton and Palmer, of Minneapolis, in the treatment of rectal ulcers in phthisical subjects. I recalled, also, some remarks on the subject of the

* Read before the Michigan Homœopathic Society.

treatment of disease by dry heat, made by Dr. Albert Claypool, of Toledo, at the meeting of the American Institute of Homœopathy, in 1887. Acting upon the suggestions thus received, I had this (utero-vesical) instrument made; it is so constructed as to be used either for the uterus or for the female bladder. It consists of a metal tube nine inches long, insulated throughout its entire length, except about three inches from the tip. This insulation renders it possible to use the instrument without passing it through a speculum, and, while the degree of heat attained within the uterus may be from 125° to 145° F., the vagina is exposed to no corresponding rise of temperature. A similar protection is afforded the urethra when the instrument is introduced into the female bladder. Two sizes of these instruments are made, the smaller to be used in a uterus in which dilatation is impracticable, but for ordinary purposes the larger one is to be preferred. After a thorough trial I became convinced of its superior advantages, and now employ it in certain disorders, to the exclusion of almost any other local treatment, except surgical operations recognized as absolutely necessary.

The influence of heat upon all inflamed tissues is too well known and appreciated to require more than a passing consideration of its physiological effect. Heat produces, in its application, the opposite effect of that of cold—relaxation first, followed by contraction, through its stimulating effect upon the capillary circulation; in other words, by stimulating or increasing the vascular supply of blood to the parts, and by stimulating the venous portion of the capillary circulation as well, we obtain improved nutrition, which means, of course, increased activity of the lymphatics and a general relief from the phlegmonous or static condition of the diseased tissue.

Wherever interrupted circulation or perverted nutrition exists, the parts suffer; therefore, any treatment which will

restore the equilibrium of the circulation of a diseased part, cannot but prove curative in its effect.

This instrument I can confidently recommend in the treatment of that class of uterine and vesical disorders in which the pathological changes are dependent upon some nutritive disturbance. Sub-involution, areolar hyperplasia, chronic metritis, endometritis, cervicitis are all quickly relieved by having the vascular supply to the organ much improved.

The method of applying the dry heat treatment to the uterine cavity is as follows: The patient is placed in the latero-abdominal position, with the hips brought well down to the edge of the chair or table. Until somewhat familiar with the use of the instrument, the retractor should be employed to expose the cervix. It is assumed that the patient has previously been examined, and the size of the tube to be selected for use has been determined by the introduction of a whalebone or silver wire probe, and the fundus located. The point of the heater should then be passed to the upper portion of the uterus. If there is no obstruction at the internal os, a steady pressure upon the instrument will usually be sufficient, but if it produces pain, the tip of the heater should be allowed to remain, and the hot water turned on; this will in a short time cause sufficient relaxation to permit the tube to pass into the cavity of the uterus. If the speculum has been employed, it may now be withdrawn, for the sake of the patient's comfort. The heater, once in place, is retained there, and the temperature gradually raised to about 125° F. The uterus is not so richly supplied with nerves of sensation as are the bladder, vagina, or rectum, so that the endometrium may be burnt without eliciting any cry of pain from the patient. However, it is well to have a thermometer attached to the tank containing the hot water, so that the degree of heat may be intelligently regulated.

During the first part of the treatment, especially in cases

of metritis, the patient may complain of a bearing-down sensation, but this soon passes off, and nothing but a warm, comfortable feeling is experienced. The séance should be continued from twenty minutes to half an hour, according to the endurance and comfort of the patient. In cases marked by hæmorrhage, it is well to prolong the application as long as thirty-five or forty minutes, or even an hour.

When employing the heater for the urethra or bladder, the greatest care should be exercised at first, the parts being particularly sensitive. It is my plan to deposit a few drops of a six per cent. solution of cocaine with an ordinary glass dropping tube, made by heating and slightly curving a piece of glass tubing, about six inches long, and having a rubber nipple at the end. This glass tube is an excellent instrument for the purpose of depositing a few drops of any desired liquid within the uterus. A few minutes after the cocaine has been deposited within the urethra or bladder, the heater can be introduced without discomfort. A few treatments will usually relieve the bladder of the tenesmus, and the tube can be placed in position without the use of cocaine. The bladder should be first emptied by a soft rubber catheter having as small eyelet holes, or apertures, as can be obtained.

Applications to the urethra will vary with the nature and locality of the disease, the metal portion of the tube being placed directly against the affected part.

The vagino-rectal tube is, as its name implies, employed both for the vagina and the rectum. For ordinary vaginal irritations, like vaginitis, the tube is to be introduced, brought to the desired temperature and allowed to remain in position for the usual length of time. It will be found, with but few exceptions, that in vaginal troubles there will also be rectal complications, the vaginitis or vaginismus being of a secondary nature. The only instructions to be given relative to the introduction of the vaginal tube is that the end of the tube should be passed well up to and under

or behind the cervix uteri. If the patient be placed in the latero-abdominal position, there will be but little trouble in introducing the tube, especially if the forefinger is introduced within the vagina, and the latter retracted so as to admit air.

The rectal heater is simply to be regarded as an adjunct to the treatment of pelvic disorders in women, and will prove to be of great value. I am satisfied of the great relative frequency of this class of complaints in connection with uterine disorders, and the successful practitioner will prove to be the one who studies the pathology and condition of rectal maladies in their relation to that of uterine disease. The recto-vaginal tube is six inches long by one inch in diameter, insulated for one and one-half inch at the base, so as to protect the tissue at the junction of the skin and mucous membrane, which is a very sensitive point. In conjunction with the local application it can be utilized for the treatment of any rectal disorders, but I employ it only for its effect upon the vascular supply to the part, to correct the nutrition of the rectum and the adjacent connective tissue. The continued action of the heat soon creates a change in the state of the tissues, and relieves the over-distended vessels.

The rectal application is the one upon which I rely the most for general use. It is indicated in all pelvic disorders, depending upon or demanding a change in the circulation. There is no local treatment known to the profession to-day that is so far-reaching in its effect and so comfortable in its application as that of dry heat, if applied in a thorough and intelligent manner. Owing to the anatomical relation existing between the circulation of the rectum and that of the fallopian tubes and the ovaries, we can readily understand how any change occurring in the former would affect that of the other organs. Likewise, how beneficial must it prove in promoting absorption in old chronic cases of cellular infiltrations, or in rousing the lymphatics and exercising

a healthy influence over the tissues here involved. In fact, the employment of the rectal tube should in itself be sufficient to encourage weak and feeble circulation by its stimulating effect of the heat, and be an important factor in our local or adjunctive treatment in diseases peculiar to women. Disorders of the cervix uteri, depending upon some morbid state or imperfect circulation as a cause of the degeneration, always prove amenable to the beneficial effect of the heat. Finally, all conditions depending upon imperfect and obstructed circulation, producing malnutrition, should prove responsive to the influence of heat.

Recognizing its advantages after two years' trial, and its homœopathicity to inflammation, according to the well-known definition of that term, I now give it to the profession for further investigation.

COCAINE IN THREATENED ECLAMPSIA.*

BY

E. P. GAYLORD, M. D.,
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CASE I.—On the 6th of May, 1889, at about 11 A. M., I was called to see Mrs. X., who was said to be flooding. Upon entering the room I found a young married woman, a primipara, who was thought to be at full term. She was a fleshy blonde of lax fiber, and of a decidedly hysterical type. Her complexion was waxen, her eyelids puffed like sacks of water, her face bloated out of all semblance to its former comeliness, her hands, feet, and limbs had the glistening appearance of extreme distention. She was having no pains, but was flowing profusely. Upon examination I found the os dilated to the size of a half dollar, and upon

* Read before the Homœopathic Medical Society of Michigan.

introducing my finger within the flaccid cervical rim I at once detected a partial placenta prævia. The visitation of the finger within the os, together with pressure on the fundus with the other hand, soon induced contraction, and the head making pressure on the cervix the hæmorrhage soon ceased. After remaining some time and no signs of advancement, I returned to my office. About 4 P. M., responding to an urgent telephonic call, I again visited her, expecting to find her either in labor or else that the hæmorrhage had reappeared. But a new difficulty awaited me. She was now suffering severely from renal colic, screaming with pain at each contraction of the ureters. A dose or two of santaline soon relieved her of this fresh complication, and no further dilatation having occurred I again left her to the care of her mother, and returned home. About 8 P. M. I was again summoned, and this time found that dilating pains had set in, and that she was making a great outcry with each succeeding pain. Examination showed slight progress. I now learned that for several days she had had imperfect vision, with bright spots and flashings before her eyes. At this time she exclaimed, "I am totally blind; something like large coppers are before my eyes, but I can see a little light at the sides of them." She was suffering intensely, dilatation progressing very slowly. The perineum was unusually firm, more so, I think, than any I had ever seen, and appearing fully an inch thick, and feeling like a firm, rigid, muscular band. To all appearances a long, tedious labor was before us, and at every accession of pain I looked for a spasm of eclampsia.

Fully realizing the gravity of the situation, I at once saturated pledgets of cotton with a four per cent. solution of cocaine mur., and using the first two fingers of the left hand as a bivalve speculum, passed them up to and around the cervix, leaving them *in situ*. At the next pain there was less outcry, the second still less, and at the third the patient

said, "Doctor, these pains don't hurt me as they did; that one was not at all severe."

Examination now revealed a complete relaxation of the circular fibers of the cervix, and I at once proceeded to make rapid dilatation with the fingers. The patient now instead of screaming with pain was bearing down considerably. By these means the first stage was soon completed, and the second stage entered upon with much spirit on the part of the patient, and no convulsions, causing me to take courage and hope for a completion without them. Meantime I made application of cocaine to the perineum and could feel the rigidity steadily give way. The descent of the head was quite rapid, and by the time the vertex presented at the outlet, the perineum was as soft and dilatable as you could wish. The patient was now assisting heroically, and complaining but little of pain. The second stage was soon completed by the birth of a large, well-developed male child, dead, in which state it had probably been for two days. The third stage was without incident, and recovery good, but slow, the patient remaining almost completely blind for some days, and at the end of four weeks vision was not entirely restored. The following morning an examination of the urine revealed a large amount of albumen, which gradually disappeared, together with the unusual œdema of the face and limbs.

CASE II.—November 1, 1889, a lady called to consult me regarding her condition. I was engaged to attend her in confinement, and her time was nearly up, but she wished relief from the distress and dyspnœa occasioned by the rapidly increasing anasarca. She was bloated in the face, and her limbs and feet were of great size, while her abdomen was of such dimension that she greatly feared a multiple birth. She did not complain of feeling bad, except for the dyspnœa and from sparks before her eyes. I asked her to send me a sample of her urine, which she did that evening. I did not find opportunity to examine it until the next

morning, when to my amazement and horror I found what at first seemed ninety per cent. of albumen, but which upon settling down decreased to a little more than eighty per cent. in bulk. She said her term was up in three or four days, and I realized that if anything was to be done it must be done quickly.

Upon the recommendation of Dr. Charpentier, I at once exhibited *apis 3x* and *apocynum cannab.* tincture fifteen drops, in water four ounces, and placed her upon the milk diet. She took no other food but milk from that time until she was confined, which fortunately was not for eight days. The first day she took only two quarts of milk, but on the second, third, and subsequent days took four quarts, meantime continuing the remedies mentioned. She did not complain of hunger or craving for other food, and the only distress she experienced was from loss of sleep, as she had, as she said, to spend nearly the whole night on the commode. The quantity of water passed was surprising. After forty-eight hours of this treatment, examination showed a decrease of albumen to about thirty per cent., and by the end of the week there was not more than ten per cent., perhaps less, while the condition of the patient was surprisingly changed. The *œdema* was gone from the face and limbs, while the measurement of the abdomen was decreased, as asserted by the patient and her mother, fully eighteen inches. I never saw such a rapid decrease. On November 8 she was confined with a normal labor without chloroform. The cocaine, however, was freely used with the usual good results. Only for a few moments was there anything to suggest eclampsia. At one time she complained of dimness of vision, an indistinct, hazy, or smoky appearance of the lights and objects in the room. She made a good recovery, without any unfavorable symptoms.

Now, my object in reciting cases in no way remarkable in themselves, is for the purpose of emphasizing two points of treatment, and thereby instigating discussion, which, to my

mind, is the principal object of our meetings, and in the hope of assisting some forlorn brother in one of the most trying positions in which a physician can be placed. I refer to the milk treatment for the albuminuria. When we have sufficient time to institute it, and thus remove the proximate cause of the eclampsia, and failing in that, or when we have no time to get its effects, to try and avoid the invasion of eclamptic seizures, by the free use of cocaine. Can we do this? Of the first proposition, I think we can safely answer in the affirmative; and, for myself, I believe the second offers more hope of success than any other manner of treatment; besides, it does not in any way interfere, neither is it contra-indicated in any other method of treatment. Without going into the investigation of the much-mooted question of the cause of eclampsia, suffice it to say that the consensus of opinion of the majority of the investigators of this subject is expressed in the formula that "eclampsia is a neurosis caused by a reflex irritation of the spinal system, originating in uterine pain."

Scanzoni says: "It has been shown that the sensory nerves extending into the walls of the uterus may, at once, by irritation excited in them during pregnancy and labor, produce a reflex action on the motor nerves, which are given off from the spine. Admit this, and it is no longer doubted that this reflex action, under the influence of extreme congestion (renal hyperæmia), may go beyond its normal limits and produce contractions of the muscles supplied by these nerves." After proceeding at some length in explanation and illustration of this point, he continues: "All the causes which lessen dilatation may also provoke convulsions, partly because the inferior segment is compressed in a marked degree by the uterine contents, and partly because the longitudinal fibers which produce dilatation are exposed to increased traction. This is one of the reasons which explains their frequency in primipara."

Finally, those of you who have been so unfortunate as to

have met with cases of this complication of labor will recall that the eclamptic seizure occurs at the accession of a pain, usually. Now if these premises are true, is it not reasonable to conclude, if we can relieve the pain, lessen the nervous irritation, take away the fear, and at the same time cause relaxation of the circular fibers and hasten dilatation, thus lessening the time of the duration of labor, that we may hope to avoid this misfortune? So it seems to me. One more thought, and I will close. If eclampsia does occur, what shall we do about it? You all know the long list of remedies as well, or better, than myself. I have only one thing to suggest, when other remedies fail: try the hypodermic injection of one-hundredth of a drop of glonoin.

DIPHTHERIA, WITH NOTES AND CASES.*

BY

J. ROBERTSON RÂY, M. D.

Perhaps there is no disease which is more interesting to the physician than diphtheria. The subtle way in which it often appears; the great difficulty there must always be in a certain number of cases, where there are no pronounced symptoms or lesions, in distinguishing it from a simple case of tonsillitis; the uncertainty of the course it runs—at one time lining the fauces and nasal passages with false membrane, and speedily causing death from exhaustion or by asphyxia, at another time the local lesions being so slight as to be unrecognized, but the subsequent paralysis so marked and grave as to lead to death—all these points will ever lead the cautious physician to give a guarded diagnosis, and, when there is no doubt as to the nature of the disease, a cautious prognosis, even in the cases apparently most simple.

* Also printed in the *London Homœopathist*.

In many points diphtheria is comparable to enteric fever, in the way in which it is conveyed by contaminated milk or water or by bad drains; the way in which both, though contagious diseases, can be safely nursed in the general wards of a hospital, provided sufficient air be allowed; and lastly the uncertainty of the course which each will run, death threatening in so many ways.

The following cases show in a remarkable way this eccentric nature of the disease:

Alice P., aged five, father a cab-driver. Mother brought her to the Kentish Town Medical Mission on September 19, 1889, saying she had fits, and turned black in the face, and foamed at the mouth. The attack first came on four days ago, on Sunday, when she had two fits, and was insensible till mid-day on Monday. On looking into mouth, throat was seen to be ulcerated. Merc. sol., 1 gr. j., 3 h.

September 26.—Throat much better, repeat.

October 2.—Paralysis of soft palate, and fluids regurgitate through the nose. China ϕ gtt. ij ter.

October 10.—Repeat.

October 17.—Nasal twang when she speaks very marked, and fluids still return through the nose. The knee jerks are absent. Very weak and shaky on her legs. Mother notices she holds books nearer her eyes than before. Has some bronchial râles in chest. Ipecac. 1x gtt. j. 3 hr. Ol. Morr. 3 j. bis. die.

October 23.—Paralysis in legs increasing. Admitted into the London Homœopathic Hospital under the care of Dr. Galley Blackley, to whose courtesy I am indebted for permission to publish the following notes.

Family and personal history.—Had measles and whooping cough, never had chicken-pox. Father alive and healthy. Mother suffers from a tumor in her throat, and underwent five operations for it. Seven brothers, all healthy now, but some had diphtheria.

Present illness came on about one week ago. Mother

noticed that there was weakness of both legs, so that the patient could not walk about. Had a cough about three weeks ago, which was continued up to the present time. The inability to swallow has been present about a fortnight. Everything she takes (liquid) comes through the nose. Never complained of the eyesight being affected.

On admission.—Rather pale, unhealthy-looking child. P. 144, regular in force, but not in rhythm. Slight weakness of legs. Knee jerk absent. Plantar reflexes diminished, especially on the left side. Neck muscles seem very weak. No apparent weakness of arms. The soft palate does not move, but there is no irregularity of the sides. Tonsils large. Tongue whitish gray fur.

Lungs.—Slight dullness of the left apex in front and weak breathing, with some coarse bubbling and crepitant râles. There are some coarse crepitant râles at the left base, but elsewhere only sonorous râles.

Heart appears to be normal; sounds good. Pupils react well to accommodation and to light.

October 24.—T. 98.2 last night; 97.6 this morning, and slight difficulty in swallowing, but fluids do not regurgitate. Abdominal respiration is less than normal. The pectorals and trapezius respond well to stimulation; the serratus magnus and obliqui do not. Gelsem. ix gtt. j , 4 *tis horis*. Milk diet.

October 25.—Temp. normal last night; 99.2 this morning. Coughs a great deal. Large quantity of mucus rattling in throat. Breathing a great deal by the extraordinary muscles of respiration. Diaphragm appears to be acting badly. During the night patient seemed to be collapsed and became blue in the face in patches. Steam kettle was put on and patient appeared to rally. This morning she is a little easier and lies on the left side. Bell. ϕ gtt. ij , 2 hrs. About 1 P. M. patient became collapsed again, the face becoming blue in patches and breathing weakly. She became progressively weaker.

Given food by enemata of about a teacupful every second hour of milk and egg and two teaspoonfuls of brandy. At 3 P. M. the child was evidently dying. Pulse was 134, very fluttering, and respirations 60. Digitalin $\frac{1}{16}$ gr. was given hypodermically, but its good effects in making the pulse stronger and more regular only lasted half an hour. The blueness passed off shortly before it was given, and did not return. The child died in spite of all treatment at about 6.30 P. M.

Post-mort. Exam.—About twenty-two hours after death; post-mortem rigidity fairly marked. Tonsils, pharynx, and larynx appeared to be normal. There was slight tracheitis and the tubes contained a large quantity of clear mucus.

Lungs.—Emphysematous in parts. No collapse. Crepitant all over. No pneumonic consolidation. There was some bronchitis of the larger tubes, but the capillary tubes were free, and were not clogged up with purulent or mucoid material. There *was* no pleurisy and no adhesions. No fluid in pleural cavity.

Heart.—Right auricle, some loose red clots in it. Right ventricle flaccid and empty. Left auricle full of white non-adherent blood clots. Left ventricle very firmly contracted and empty. About 1 drachm of fluid in the pericardial sac. All the valves appeared healthy with the exception of the aortic, which was redder than natural. The heart muscle appeared normal.

Liver, spleen, and kidneys normal. Bladder full of pale urine. Brain and cord not examined. The blood in the veins was fluid and dark colored.

Percy P., aged three, was first brought to me on October 10, 1889. He is brother to the above patient, and has had a similar throat and coughed "like a dog," and his grandmother said it "sounded like croup." Nothing can be seen now in the throat, but from the history conclude that he has had a mild attack of diphtheria, so gave him merc. sol. I , gr. j , 3 h.

October 17.—Tonsils not enlarged. Knee jerk almost absent. Nothing the matter with his general health. Eats and drinks anything well. Repeat merc. sol.

October 23.—Knee jerk present to-day on both sides; mother said his breath still smells as when he was first attacked, and sometimes he cannot swallow. The glands at the angle of the jaw on the left side are increased. Repet., ter die.

October 31.—Slight bronchial catarrh. Ol. morrhux, 3 j bis die p.c. and ipecac., 1x gtt. j, 3 hrs.

November 7.—Much better. Repeat.

December 12.—Quite well. Knee jerks present.

William P., aged nine; another brother; brought to me October 17, 1889. Throat bad four days ago. Now the tonsils are enlarged. No false membrane. Glands at the angle of the jaw on the left side are enlarged. Both knee jerks are absent. Merc sol. 1, gr. j. ter die.

October 24.—Knee jerks still absent; throat nil. Repeat.

October 31.—Knee jerks still absent, but he is much better. Ol. morrh. 3 ij. bis die.

November 7.—Knee jerks returning faintly. Repeat ol. m.

December 12.—Both knee jerks present. Quite well.

Charles P., aged twelve; another brother. His mother asked me to see him, saying he was going weak in his legs, like his sister Alice did. I went to see him and found the left leg rotated inward, with, apparently, no power to rotate it out. There was no pain in movement in hip-joint or elsewhere. It seemed to be due to a localized paralysis of the external rotators of the femur. Remembering the family history, I suspected it was another case of post-diphtheric paralysis, so at once admitted him to the London Homœopathic Hospital under Dr. Galley Blackley.

The following notes were made by the house surgeon, Mr. Cox:

Patient admitted for persistent rotation inward of the left leg and foot.

Previous health.—Had measles when an infant. Has always been pretty strong up to present time; could always walk well, and legs were quite straight.

Present illness.—This boy seemed to escape the attack of diphtheria which affected the other children. About the second week in April he was walking with his grandmother when she noticed his foot seemed to turn inward, and he began to drag it. Once or twice he said it ached and caused him to cry, but he did not seem to have much pain. There was never any difference noticed in the temperature of the two limbs. The leg seemed to get weaker. He was taken to Dr. Day about a week ago, and he was sent in here on May 17. He has always taken food well. Bowels regular. Has lost flesh a little lately; no difficulty in swallowing; no other symptoms noticed by the mother.

On admission.—Fairly healthy boy, fair complexion. Heart normal; area of the liver, apex beat 4th space $\frac{1}{2}$ in. internal to nipple; lungs quite healthy; tongue fairly clean.

There is marked inversion of the left leg, so that the toes of the left foot point to the right side. There appears to be no wasting of the limb muscles, and not any coldness of the limbs; knee jerks normal; no ankle clonus; pupils react perfectly to light and to accommodation.

Fauces examined.—Granular condition of fauces, but no paresis of palate muscles. Sleeps well. Bowels acted once, greenish, relaxed stool.

May 19.—To-day the leg has got back to its normal position and the patient walks about quite well.

May 22.—Still quite well.

Remarks.—There are many interesting features in the above cases. The disease was so slight in Alice P. as to be at first unrecognized, until the palate became paralyzed; then followed paralytic symptoms of undue gravity, out of all proportion to the primary attack, and culminating in death by syncope.

Percy and Wm. P. had the disease so slightly, that, but

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for the sister's attack it might readily have been overlooked altogether. These two boys had the knee jerk first diminished, then absent, and this in doubtful cases is likely to be a symptom of great value as regards a correct diagnosis.

It is to be regretted that no examination of the urine was made.

The last case, of Chas. P., although it at first simulated post-diphtheritic paralysis, especially happening in a family where there had been diphtheria, was evidently a case of neuromimesis, which, although more common in girls about this age, is not unknown in boys. I subsequently learned that he had been previously admitted into the Northwest London Hospital for the same complaint, and in a short time discharged *quite well* and walking properly; this relapse is again strong evidence of its hysteroid nature.

The following case from the *Brit. Med. Journ.*, read in connection with the foregoing, is instructive:

A. R., æt. forty-one, had been engaged uninterruptedly as charge-nurse in diphtheria wards for eighteen months. March 31, noticed to have paroxysmal convergent strabismus of both eyes. Advised to go off duty, but refused to. Paroxysms increased, and then lost power over hands, and at same time slight anæsthesia of palate. Throat quite clear, and urine had a heavy trace of albumen. Patient warded on 16th, as squinting increased and legs began to drag.

Being pressed, she acknowledged having had sore throat six weeks before, but considered it only a simple sore throat. Also confessed she had seen two very minute patches, one on each tonsil. At same time there had been headache, shivering, and vomiting, but she did not complain, and continued her ward work.

March 19.—Hyperæsthesia of forearms; urine small in quantity, contained more albumen. Two days later, numbness in legs and a feeling "as if wool were between the fingers and palms of hands." Loss of power in legs and

Digitized by

arms more and more marked, and on 24th complete loss of sensation in lower limbs and partial in arms.

Pupils much contracted and power of accommodation greatly impaired. Knee reflexes absent. Temp. persistently subnormal, 95.4° to 98° , average 96.8° . Pulse kept very small. Several attacks of syncope. Patient had bad nights and slept little. Motor paralysis became extreme, and on March 25 galvanism commenced. By 30th motor power improved, but anæsthesia persisted. Urine now free from albumen. April 6th, reaction of pupils began to improve, and on 12th squint practically disappeared. Still absolute anæsthesia of arms. On 20th, able to sit up, but could not stand. Vision, which had been again much impaired for some days, began to improve. On 25th, knee jerk normal and patient could read for a short time, after which letters ran together. She was still unable to stand. On 30th, could take a step or two with assistance, and May 7, with crutches, could walk some yards. Sight not clear. Sensation almost normal over body. From this date she rapidly improved, left leg dragging a little when she left for seaside, May 21.

Treatment consisted in free stimulation, owing to threatened cardiac failure, and administration of iron and quinine.

HAMPSTEAD, ENGLAND.

CROUPOUS PNEUMONIA.

BY

S. MORRISSON, M. D.

This form of inflammation of the lungs is one of the diseases which has been better defined and better understood of recent years. In severe cases the cough, feverishness, debilitating perspirations and emaciation bear such a strong

resemblance to phthisis pulmonalis that the detection of the micrococcus of pneumonia, the absence of the tubercle bacillus, or the want of evidence of the deposit of tubercle, form the chief distinguishing characteristics. We have long known that catarrhal pneumonia is a frequent precursor of phthisis, but the liability of croupous pneumonia to run into the more fatal disease has been less generally recognized.

For pathological purposes it is convenient to divide the course of this disease into three stages: 1. Invasion; 2. Hepatization; 3. Degeneration.

Invasion is commonly ushered in by symptoms of a severe chill, as with the catarrhal form. Inflammatory action leads to an engorgement of lung structure. This usually occurs in a portion of one lung only, the right lung being more frequently attacked than the left, and the lower lobe in preference to the upper. Herein it is the opposite of primary phthisis. But the exceptions are numerous. This is the stage of engorgement, with rapid infiltration, the portion of lung affected becoming consolidated, losing elasticity, and giving a dull sound on percussion. To a quick pulse and high fever temperature are added a distressing cough, with panting respiration, fever blisters on the lips, and crepitation. The presence of these fever blisters, the absence of abdominal symptoms, and the physical signs distinguish it from typhoid fever; though the more grave form is often called typhoid pneumonia. As mischief progresses the second stage develops, that of

Hepatization.—Infiltration having become more or less complete, sero-plastic exudations form in the air cells, and in the meshes of these exudations are numerous red and white blood corpuscles, the presence of the former being due to the rupture of capillary vessels. The structures involved become darker, heavier, less crepitant and friable, and the expectoration has the characteristic rust color. No doubt the expression hepatized originated from the

liver-like appearance of the affected lung structure. But this stage is completed by the fibrinous material and the red corpuscles being replaced by embryonic and epithelial cells, the products of emigration and local proliferation. Some authors divide this process into two stages, that of red and gray hepatization, an unnecessary sub-division, as the gray form is merely the commencement of the degenerative process. Passing on to the third stage, it has been found that these more recent elements undergo fatty transformation, and this constitutes actual

Degeneration.—The broken-down products are either expectorated, absorbed, or form an abscess. Expectoration becomes pus-like, and should an abscess form it may become putrid, sometimes with gangrenous exhalations. These three processes may run their course concurrently, even in the one lung. While one patch, or a section of one patch, is undergoing hepatization or degeneration, an adjacent patch or section of a patch may be commencing the inflammatory process of invasion. Another important factor is the frequency with which metastasis occurs. I have had under my care a young married lady in whom the disease came on insidiously. It was three weeks after the chill when I was called in. Hepatization existed over the lower lobe of the right lung, cough was persistent and distressing, with semi-purulent expectoration, soreness over the affected portion, evening exacerbations of feverishness, hydroæ on the lips, and debilitating night perspirations. Although the symptoms were grave for another four weeks, the pulse did not exceed 88 (except during attacks of palpitation), nor did the temperature rise beyond 38° C. (100.4 F.). The family history is phthisical. Three weeks after commencing treatment an ague fit occurred. Similar attacks recurred, of the tertian type, and inquiry elicited that she had a series of attacks some eight years previously, when living in Pimlico. Arsen. 3, followed by sulphur 30, relieved her of this unwelcome complication. Prior to these attacks of

ague the pulmonary congestion transferred itself from the lower lobe of the right lung to the lower lobe of the left. Subsequently it was transferred to the left subscapular region, from thence it again invaded the lower lobe of the left lung, then it again took up a temporary residence in its old quarters at the base of the right lung, then in the upper lobe of the left lung, and so on. Lycopodium 12 and 30, sulphur 30, aconite 3 and 30, spongia 1, bryonia 3, and matrix tincture, and quassine in centigramme granules helped her, but the chief honors of the second stage belonged to lycopodium and sulphur.

Other names for this disease are fibrinous and lobar pneumonia, which are pathologically more accurate than the fanciful designation of croupous. Both this and the catarrhal form are popularly known as lung fever. Here, again, is an imaginary distinction, in that simple congestive pneumonia should be termed catarrhal, as opposed to the localized form. Both are catarrhal, but croupous pneumonia is more common in the adult, catarrhal in infancy and old age. Localized pleurisy is almost certain to accompany a severe attack, and rheumatic aching in the limbs are common. Where further lung mischief threatens, the rust-colored expectoration, due to the presence of blood from the digested portions, may be replaced by the admixture of bright blood from freshly-ruptured capillaries, with the lumpy or tenacious mucus, which is an indication for the consideration of hyoscyamus, in medium or high potencies.

Diagnosis is important, because of the future liabilities. In the catarrhal form where fatal results occur the patients die from the mechanical effects of the congestion. One lung, or both lungs, may become so completely occluded that an efficient aeration of the blood is rendered impossible, and the patient dies asphyxiated. In the croupous variety death is more frequently due to a failure of vital power, consequent on the exhausting nature of the disease. Supposing a case of the catarrhal and of the croupous kind well

marked, the one usually occurs in childhood or old age, is more or less associated with bronchitis, and the fever runs a sthenic course; the other occurs in adult life, is associated with pleurisy, and the sthenic febrile symptoms of the early stage give place to the asthenic symptoms of a debilitated constitution. Catarrhal pneumonia runs a fairly straightforward, though dangerous, course; but the croupous form is uncertain and treacherous, both as to relapses and duration. The usual time for a single acute attack to last is from fourteen to twenty-five days, but the chronic form, which means a succession of invasions, with only partial recoveries between, may continue for months or years.

In the early stage of a severe onslaught the evening temperature may reach 40° C. to 40.55° C. (104° F. to 105° F.), with a morning fall of 0.5° C. (0.9° F.) to 1.90° C. (2.7° F.); a pulse of 100 to 110, and respirations of 40 to 50 (Raue)—as a rule the pulse rate is below that of the respiration. Mobility of the chest-walls is decreased, vocal fremitus is increased, and crepitation becomes well marked. The cough is frequent and distressing. The frothy mucus is soon replaced by the rust-colored expectoration. This stage usually lasts from two to five days, and is characterized by the concurrence of high febrile symptoms, with dullness and crepitation.

The second stage shows increased dullness, bronchophony and pectoriloquy are heard, and the soreness of congestion becomes complicated by pleuritic pains. The cough becomes deeper, is more paroxysmal, and recurs at longer intervals; while the lumpy expectoration assumes a lighter color, and may be tinged with arterial spots or streaks. This stage continues from five to eight days.

After this comes the third stage, in which degeneration leads to the expectoration of broken-down material, and to resolution and recovery; or to the formation of an abscess, possibly with gangrene; or to tubercular infiltration, with the usual consumptive symptoms; or to death from exhaus-

tion. The pulse and temperature fall rapidly, and where the result is favorable the chest sounds become tympanitic; respiration becomes easier, and mobility returns. The duration of this stage is from seven to fourteen days. Where the result is unfavorable the affected structures become oedematous, or serous infiltration occurs, and the expectoration becomes more purulent, or tenacious and frothy, and the duration of the illness very uncertain.

Beside these symptoms of the various stages are those of the general run of febrile diseases, such as thirst, restlessness, nausea, headache, anorexia, furred tongue, irritability, turbidity of urine, and a dryness of skin, followed by profuse clammy perspirations.

Prognosis is usually favorable, but requires to be guarded, because of the treacherous character of the disease. I passed through all these stages, including a gangrenous abscess, upward of sixteen years ago, and can speak from personal experience. Very few who have that complication live to tell the tale. The results in my own case show that patients should not be content with a partial recovery, but should make special sacrifices to obtain a restoration to thorough health. If the germs of the disease linger in the injured lung a recurrence of illness is extremely probable, the slightest chill stirring up fresh mischief. Catarrhal pneumonia is more immediately fatal; under the old treatment it was discounted at twenty-five to fifty per cent., but the croupous form may wear the sufferer out by the repetition of the attacks. Here is a case in point in which this would have occurred, but for timely help. On the 2d of November, Mrs. P., of Dover, consulted me, stating that six years previously, as the result of chill, severe aching pains came in all the limbs, with soreness in the chest, "a dreadful cough," and heavy night perspirations. Never entirely lost the cough, and has been under medical care, at frequent intervals, ever since, but does not know what the disease really is. Thinks she has recently been

treated for bronchitis, but her own feelings are that she is running into consumption. Has always suffered from inaction of the liver. The previous April had a large tumor removed from the left shoulder; a few days after, an artery burst and she had a narrow escape from bleeding to death. Her chest symptoms returned in an aggravated form in September of last year (1890). Questions elicited that she had a violent, spasmodic cough ("like whooping cough"); with greenish, semi-purulent expectoration, catching pains in the lower lobe of the right lung, and debilitating night perspirations. There was great dyspnoea, emaciation, and furred tongue. Examination revealed a tender, crepitating, consolidated patch near the center of the right lung, and another in the subclavicular region of the left lung, with loose bronchial rattling over both lungs. Pulse 88; temp. 39.60° C. (100° F.) The indications of active mischief, with the soreness and greenish expectoration, led me to select phos. 12, to be taken every three or four hours, with an occasional dose of *drosera* φ for the spasmodic cough. Linseed poultices were ordered. On the 16th November the general symptoms remained about the same, with aching pains in the right subscapular and right lower axillary regions, and dropsical swelling of the feet and ankles. The perspirations were clammy, yet with general feelings of heat. Evidently the phosphorus stage had passed, so *lycopodium* 12 was selected, with *bryonia* φ , to replace *drosera*. Cod-liver oil was ordered. By December 7 improvement was very marked. Respiration was easier, cough and expectoration and the perspirations had almost ceased. Pulse 84; temp. 37.10° C. (98.8° F.); resp. 28. *Lycop.* 30 was prescribed. She happened to come to London on a raw, snowy day, which brought a return of bronchial irritation. This was relieved by *antim. tart.* 3x. On December 23 she was out of doors and caught a chill, which resulted in a sharp attack of epidemic influenza, with soreness through the center of the left lung. This was relieved by *arsen.* 3 and *phos.* 3. Early

in February she wrote that her old cough had practically gone, and she was feeling fairly well. On the 5th of May she wrote for medicine to relieve a fresh cold. I did not hear from her again till August 11, when, in reply to inquiries, she answered: "I have been away for change of air. Am pleased to say that I am very much better, and have lost my cough." Such a report is almost as satisfactory as a personal inspection, for intelligent patients can record their own feelings.

An unsatisfactory element in this disease is the rapidity and frequency with which mischief transfers itself from one part of the lung to another. Just as a patient seems on the point of making satisfactory progress a relapse takes place. Unless patients and friends are warned of this liability, they are apt to consider the most careful treatment inefficient, when, in fact, that very care is lessening the severity of the onslaughts, lengthening the intervals, and bringing about an ultimate recovery, which would not be possible were the disease left to run its natural course. Where fatal results ensue, which, happily, under improved methods of treatment, have become far more exceptional, these usually take place in viciously acute attacks, from the third to the eighth day, or up to the twenty-third day; and in the more chronic forms from two months to two or five years, the latter usually being where phthisical symptoms supervene.

Treatment should be sustained with perfect rest and freedom from noise, strong light, dust, and sudden changes of temperature. Patients should be guarded from the influences of strong east winds, as well as from the incursions of cold and damp. Sensitiveness to light is sometimes equaled by sensitiveness to noise. During the crisis stage of my own illness I could hear the ordinary conversation of the kitchen, which was three floors below. Talking, also, is trying to the patient, whether as a principal or a listener. The lungs and brain want rest. Linseed poultices properly applied are very soothing to painful parts. Not the doughy

structures of the crude attendant, but the moist, lightly mixed, and decent-sized applications of the skilled nurse. These can be covered with bleached lining-wadding larger than the poultice, and bound closely on. A couple of safety pins through the undervest or nightdress will prevent the slipping down, and a well-applied poultice should keep warm all night. The skin should be wiped dry, or sponged and wiped on its removal, and a layer of fresh wool, or silk, or flannel applied. Irritants to the skin, such as iodine, blistering fluids, and croton oil should be looked upon as the relics of a bygone age. The hydropathic pack is almost equal to poultices, provided care is taken not to chill the patient. In applying it on a larger scale, as the wet sheet pack, it is used to reduce the fever temperature. Aconite 1x to 3x, repeated every quarter-hour to every hour, will regulate the temperature with equal certainty. Ventilation of the room is essential, but the temperature should be carefully regulated; in cold weather 15.2° C. (60° F.) to 17.6° C. (64° F.) being the standard. But at any season of the year great care should be taken to avoid sudden changes, especially to a colder temperature. Tepid spongings are very grateful to the patient, especially with a tablespoonful of strong white vinegar or dilute acetic acid added to the quart of water. Mentioning this reminds me of another febrile disease, scarlet fever, in which these spongings not only soothed the patient, but greatly lessen the risks of infection. The body should be completely covered, but not too thickly. Woolen and silk garments are excellent. Heavy counterpanes should be cast off; blankets only are far superior. The latter are warm, light, and porous. Use twill sheetings in preference to linen, no matter how fine and elegant the latter may be. Diet must be regulated, but somewhat in accordance to the tastes of the patient. And here I should add a plea for coffee for breakfast, as more sustaining than any amount of sloppy tea. If it interferes with the action of certain medicines, so much

the worse for the medicines. Either very high or very low potencies, repeated every hour to every three hours, will overcome that difficulty, if selected in accordance with the rule of *similia*. Cocoa makes a palatable and nourishing beverage, but does not suit every digestion. Tea should be used in moderation. Kolatina and Kola chocolate are coming into favor, and are very useful in conditions of debility. Milk, barley water, toast water, black currant tea, tamarind water, home-made lemonade, effervescing Salutaris water, and other simple drinks may be used to supplement our natural beverage. Foods should be appetizing and nourishing. Light, plain meats, such as poultry, game (not high), fish, and mutton, with beef tea, broth, and well-prepared extracts of meat form a sufficient variety during actual illness, together with milk foods, light puddings, fruits, and the lighter vegetables. Bread is an important article, whether taken plain or as toast. Milk loaves and brown bread, made from fine meal (not the usual whole meal bread), with germ bread, frame food bread, and the white and wheat meal aerated bread make palatable changes from the ordinary bread in common use. Many bakers still use alum, with something else to back it up, as a means of improving the appearance of indifferent flour. Really good flour does not require any adjunct of that kind. The general principle of diet should be to have everything of good quality, well cooked, and nicely served at the proper times. Under these conditions the simplest foods are palatable.

The proper selection of medicines is of great importance. Many doctors adopt the "expectant" method, which means careful nursing, dieting, and cod-liver oil, but ignoring the specific action of medicines. Some three years since I was called in to meet a neighboring practitioner, who carried these ideas out to the letter in a case of double pneumonia. It was the second dangerous attack from which the young man had suffered within three years. His condition was

very desperate. The only alteration in treatment was the substitution of lycopodium 12 for the simple mixture he was taking. From that time he improved, and gradually recovered. He has since had a recurrence, but having removed to another district I did not see him, and so cannot give details. Dosimetric practitioners are attempting the jugulation of febrile diseases by the administration of aconitine, digitaline, and veratrine, and with a fair amount of success. Whether patients always give them credit for the success is another matter. There is a certain amount of risk with this process. In a case of typhoid fever seven granules of aconitine, one granule every hour, nearly jugulated the patient. The temperature fell from 39.40° C. (103° F.) to 36.5° C. (96° F.), and recovery was retarded by the formation of abscesses. Since then I have used the first centesimal trituration of aconitine for the reduction of temperature, one grain in water every hour for four or five doses, and with satisfactory results.

As an item of personal observation and experience, a few medicines come well to the front. It appears to me that lycopodium and sulphur are to croupous pneumonia what aconite and phosphorus are to the catarrhal form—our sheet anchors. But the range of selection is large, though the following are the chief drugs for ordinary use:

Aconitum napellus, 1x to 30, for general febrile symptoms, with high temperature; dry, hot, skin; extreme thirst; hydroæ on the lips; evening exacerbations and nocturnal restlessness.

Antimonium tartaricum, 3x trituration, for the later bronchial symptoms; with loose, mucous expectoration; or difficulty in expectorating; with œdema of the lungs; and especially in elderly people.

Arnica montana, 1x to 3x for pain and soreness, with lumpy, prune-juice expectoration.

Arsenicum album, 3x to 30, for general catarrhal symptoms, with wheezing respiration; burning pains (especially

in the right lung); periodical exacerbations, especially from 1 to 3 A. M.; with dryness of the tongue, parching of the lips, and a frequent desire for drinks in small quantities; and vital prostration.

Bryonia alba, matrix tincture to 30, for bronchial and pleuritic complications, with exudations, with free expectoration, or the stitch pains and dry spasmodic cough of pleurisy, with rheumatic tendencies.

Calcarea carbonica, 3x trituration to 30, in scrofulous patients, with enlarged glands, clammy perspirations, especially of the hands and feet, with thick yellow or putrid morning expectorations, and phthisical tendencies.

Calcium hypophosphite, 3x trituration, in tendencies to abscess, to lessen the formation of pus.

Carbo vegetabilis, 3x trituration to 30, for gangrenous exhalations, and in collapse, with blueness of the skin and coldness of the extremities.

Chamomilla vulgaris, matrix tincture, 20 to 40 drops in a wine-glass of hot water at bedtime to arrest debilitating perspirations and to induce sleep.

Digitaline, first centesimal trituration, one grain to a tablespoonful of water every 15 to 30 minutes, for four to six doses, to relieve distressing palpitations; with intermittent pulse.

Drosera rotundifolia, matrix tincture, for a free expectoration of pure blood, whether bright or clotted; especially if with a hard, spasmodic cough; increased by liquids.

Gelsemium sempervirens, 1x to 3x, for passive congestion, with great drowsiness; slow pulse; stitches in the right chest; and dry cough; with spasm of the glottis.

Hepar sulphuris, 3x to 30, for hectic fever, with a dry, barking cough, and rattling breathing during sleep.

Hyoscyamus niger, 3x to 30,¹ for spasmodic night cough, excited by a tickling in the throat (also *lachesis*); with expectoration tinged with blood, and² as *hyoscyamine*, 3x trituration, for typhoid symptoms, with nocturnal delirium.

Lachnantes tinctoria, matrix tincture, for stitch pains in the right chest; cough worse in bed after sleeping, with bloody expectoration, and with phthisical tendencies.

Lycopodium clavatum, 12 to 30, during the second and third stages. Loose cough, with lumpy expectoration, purulent, fetid, saltish, yellow, greenish, or with blood, copious on waking, and during the early evening; night cough, with lumpy expectoration, or which does not wake from sleep; dyspnœa on the slightest exertion; sighing respiration, dilatations of the alæ nasi; and flatulent dyspepsia, with epigastric constriction, and irregular action of the bowels.

Magnesia carb., 12 or 30, for a harsh, straining cough, which brings neuralgic shootings up the cranial nerves, with scanty expectoration, and especially in the gouty diathesis.

Phosphorus, 4x to 30, in the stages of invasion and hepatization; with hacking or hollow cough; expectoration frothy and streaked with bright blood; or rust-colored, purulent expectoration, with soreness in the lungs; cough excited by talking, movement, and a change to colder air; cough worse before midnight, from drinking, and on lying on the left side.

Spongia, 1 to 30, for a hoarse, barking, laryngeal cough; worse before midnight, from cold air, dry, cold winds, and talking; with whitish or frothy mucus and partial aphonia.

Sulphur, 12 to 30, for a short, dry, constant cough, or with greenish, purulent, sweetish or saltish expectoration, with stitches and soreness, through to the left scapula, in pneumonia of the left upper lobe, especially in the later stages, and as an intercurrent remedy, when carefully selected medicines fail to give relief.

Other medicines should not be overlooked, such as apis mel. for dropsical effusions; iodine, for the early stage, with extensive hepatization; lachesis, for irritating throat cough, worse on lying down, with great dyspnœa; merc. sol., for bilious complications; opium, for the typhoid condition, with flushings followed by hot sweat, and mental hallucina-

tions ; and pulsatilla, for semi-lateral (left side) perspirations, with rapid respiration, and gastric troubles. Quassine has been referred to. The medicinal properties are those of a corrective of atonic dyspepsia, with thickly coated tongue and loss of appetite. In this condition it can be administered without interfering with the action of specific medicines, just as cod-liver oil may be given during an ordinary course of treatment, or it may be given three or four times a day, without affecting the action of remedies suited to the nightly aggravation of cough. The administration may either be as granules, two or three for each dose, or as the third decimal trituration of the extract, five grains to two-thirds of a wine-glass of water, flavored with lemon.

Certain vapors and inhalations are of service. Calcium periodate (periostate) is coming into favor in germ diseases, with the advanced section of ordinary practitioners, both for administration and inhalation. The former is by grain doses, made into pills, and the latter by the vaporizer, in the proportion of one grain to 1000, or to 5000, of distilled water. The germ-destroying power is said to reach 1 in 5000. This sounds very like the children's idea of putting salt on the bird's tail, but *we* know that both iodine and calcium possess remedial powers far beyond those of mere chemical effects. Another substance, decidedly efficacious, is creolin (Jeyes's). Thirty to sixty drops in water, in a small vaporizing lamp, or in a bronchitis kettle, will soon diffuse its odor through the room ; cleansing the atmosphere, and easing the expectoration of tenacious mucus. Or a few drops may be put into an ordinary jug or inhaler. A third substance is eucalyptus, an excellent purifier, but much overpraised for its supposed medicinal value. A few drops of this will suffice, used as directed for creolin, or by means of a respirator. Hyoscyamus, 20 to 30 drops, is particularly efficacious where bronchial symptoms predominate, especially if with low, muttering delirium. Creosote and carbolic acid have, of course, their advocates. I prefer creolin, as

being more efficacious and non-poisonous. Terebene and pinol are of use in soothing the patient, and in promoting expectoration. Whichever is selected, it should be used strictly in moderation, so that the atmosphere of the room may not be disagreeable to either the patient or attendants.

Change of air, especially where the surroundings are unfavorable, is of great benefit ; but too much reliance may be placed upon the mere change. Home comforts should not be entirely sacrificed, neither should medical care be neglected. Good nursing does a great deal, but the chronic forms, and the onset of broncho-pneumonia, are often very insidious. In some cases the patient has been thought to be suffering only from ordinary catarrh, with debility, where the stethoscope would at once reveal the crepitant râle, and percussion show the dullness of hepatization. Where the effects of a chill do not readily pass away, it is well to have attention early, rather than risk the dangers and expense of a prolonged illness.—*Ibid.*

26 HARLEY STREET, W., LONDON, ENG.

• EDITOR'S TABLE. •

—Dr. Kassowitz (*Annales d'orthopédie*) protests very energetically against the theory which attaches rachitism to a diminution of the salts of lime in the alimentation or to an insufficient absorption of these salts in consequence of a faulty digestion. He thinks the fundamental cause resides in an inflammation of the osseous tissue and not in an insufficiency of calcareous material.

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—The treatment of whooping-cough by the use of sulphurous acid, as first advised by Mohn, of Christiania, has lately given some favorable results (*Semaine médicale*). The mode of applica-

tion is quite simple. Sulphur is burned in a room, as for disinfection, and the sulphurous vapors are allowed to remain five to six hours in the closed chamber. The room is then opened and aired for from five to six minutes only. The little patient is now introduced into this atmosphere and left there all night. The first inspirations produce one or two paroxysms of cough and then the patient sleeps. During this night the cough only returns once or twice. The amelioration is maintained the following day, and, if the treatment is renewed several times successively, the whooping-cough disappears entirely, in ten, fifteen, and rarely twenty days.

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—The *Bacteriological World* appears upon the editorial table as our latest exchange, the first issue beginning with January, 1891. For those especially interested in the study of micro-organisms this journal will be of interest, as it deals very largely with technique as applied to bacteriology.

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—We are just as interested in the advancement of pure homœopathy as any other believer in the law of similars, but we feel that it will not forward our cause one step to allow a *confrère* to pass unchallenged when he deliberately states that "one reason why we should not give anæsthetics in labor is because the old school do." As well say we should discard the forceps, manual extraction, or version because the old school employ these methods. We recognize the author of this remark as one of the sturdiest wheel-horses of our car of progress, and have to thank his efforts for the preservation of an even balance in many instances where the pathological prescribers wished to predominate. But we deprecate such an exhibition of fanaticism as being on a par with a case in which lachesis was given to a woman dying from septicæmia due to retention of a dead and putrescent fœtus, when the evacuation of the uterus would have given the patient a chance for life.

● GOLDEN GRAINS. ●

—Obesity is a cause of sterility and also of abortion ; very fat animals are bad breeders.

—*Ascarum canadensis* is related as having caused, in a case of poisoning, swelling, pain and heat about the anus and the vulva. The labia majora, the nymphæ, and the vagina were greatly swollen, with a burning sensation causing a constant desire to urinate, although micturition was very difficult and painful.

—In abortion never draw upon the portion of the ovum engaged in the cervix, unless you intend to follow extraction with a complete evacuation of the uterus by the use of the curette.

—Maternal mortality in old primiparæ, viewed in the light of late statistics, is not greater than in the first labors of younger women. The same statement applies to childbed morbidity. The infant mortality is capable of reduction to the usual average by proper management.

—*Nitric Acid* is indicated for cholera in children who are thin and dried up. The legs are apparently nothing but skin and bones. The stools are green and slimy, with noisy flatus, and are worse at night.

—Sulphate of atropine (1 per cent. solution) given to nursing women, by subcutaneous injection of 0.003 to 0.005 gm., produces dilatation of the pupil of the nursling, which disappears in twenty-four hours.

—If even the tip of the urethral orifice be adherent in the morning only, a man is unfit to contract marriage. Again, if after violent exertion, especially if the effort be accompanied with indulgence in malt liquor, a single drop of muco-pus can be expressed from the meatus urinarius next morning, that man is unfit for marriage. He is in a condition more surely to convey infection to his wife than to another.

—During labor, in the exhausted states of the nervous system, *ignatia* serves well.

—*Laurocerasus* is useful in the asphyxia of new-born children when there is great blueness of the face, with twitchings of the muscles of the face and gasping without really breathing.

—In order to diagnose, by examination of the parts, an early tubal pregnancy, the presence of decidua cells is not an absolute necessity, but in all cases of tubal pregnancy of the first month, tufts of chorionic villi are to be found. If a solid organized blood-clot be found in the interior of the tube, it is probably, if not certainly, an indication of tubal pregnancy. These features help to distinguish true cases of very early tubal gestation from ruptured hæmato-salpinx due to other causes.

—Lactic acid is now recommended by the old school as an effectual remedy in infantile diarrhœa where there are frequent green stools containing undigested food. Dr. Thomas (*Rev. Méd. de la Suisse Romande*) also states that he uses it with success in cases of gastric or gastro-intestinal dyspepsia without fever, characterized by vomiting and flatulence and by diarrhœa of non-slimy, fetid, yellowish or greenish stools containing undigested curds.

—Among the predisposing influences of hypertrophy of the tonsils few are so potent as age. Hypertrophy of the tonsils is essentially a disease of children and young adults. Although rarely congenital, it is frequently observed in the earlier years of life, but more often between the fifth and twentieth years. Not more than one case in ten is older than thirty years, and beyond the fortieth year it is rarely observed. All writers agree that among the predisposing causes a cachectic state, particularly that due to struma, is prominent. Sex also has its influence, for hypertrophy occurs about twice as often in males as in females.

—Dr. Roulland (*Br. Med. Jour.*) has worked out the mechanism of obstetrical paralysis at birth very completely. Spontaneous paralysis may occur through the clavicles being pushed inward during the passage of a broad-shouldered fœtus through a narrow pelvis. The fifth and sixth cervical nerves are thus compressed. The forceps may directly contuse the brachial plexus; the finger or the blunt-hook applied to the axilla to disengage the shoulders

may press the clavicle in and damage the cervical nerves. These nerves have been damaged, at least in one case, traced into adult life, by constriction of the child's neck by a coil of the umbilical cord. The forking of the fingers over the nape—a well-known maneuver in breech cases—may cause paralysis by direct damage to Erb's point. Pressure on the shoulders and direct traction on the arms may cause damage to the whole cervical or brachial plexus. Still graver results may follow clumsy handlings of the arms, shoulders, or neck of a foetus. Thus the branch between the sympathetic and the first dorsal nerve has been injured, the effects being seen even in the pupils. Again, a child may be maimed for life by manipulation of its arms at birth; nor must it be forgotten that convulsion of the limb has followed an apparently moderate degree of traction.

—*Eupator. purp.*—Suppression of urine with restlessness. Burning and smarting in urethra, with constant desire; incontinence in women.

—*Conium.*—Violent vulvar pruritis, with pressing down of the uterus (*Cal. Hom.*).

—Blanche (*L'Union Méd.*) gives a summary of his studies upon asthma in children: Three elements appear in every attack of true asthma: (1) Dyspnoea, the nervous manifestation; (2) emphysema, the alveolar manifestation; (3) exudation, the catarrhal element. One of these usually predominates, according to the stage of the disease or the condition of the patient, forming three clinical types. Nervous asthma is not uncommon in children and is frequently due to reflex irritation. The study of nasal asthma is of recent date, but it is a form frequently found in children. Mucous polypi are rare, but adenoid growths are very common in children. Hypertrophies of the mucous membrane are common and arise from the same causes as in the adult. A child predisposed by hereditary tendency, by diathesis, or by diseased nasal membrane may suffer an attack from numerous exciting causes.

—In the aphthous sore mouth of infants there are three remedies which present quite similar symptoms. Under borax this inflammation of the mouth appears as a concomitant of a

diarrhœa in which the stools are usually green, though they may be soft and yellow, but always containing mucus. The mouth is hot and the mucous membrane around the aphthæ bleeds easily. The child lets go the nipple and cries as with pain, or else refuses the breast altogether. Underlying this sore mouth is an ill-nourished system. The face is pale and there is the well-proven symptom, "the child dreads a downward motion." Bryonia has also cured infant's sore mouth, but the characteristic symptom corresponds with the action of this drug, in depriving the mucous tract of secretion. This characteristic symptom is, "the child refuses to nurse or makes a great fuss about it, but so soon as its mouth is moistened, it takes hold of the nipple and nurses energetically." Mercurius comes in as a substitute for borax when there is salivation with the sore mouth. Water dribbles from the child's mouth. The diarrhœa is accompanied by the characteristic well-marked tenesmus, which is sufficient to distinguish mercury from borax.

—Dr. Ballantyne has made exhaustive study of the relations of the pelvic viscera in the infant. His conclusions are founded upon the examination, by the frozen section method, of eight infants. The sacrum is shown to be almost straight, the rami of the pubic bones are stumpy, and the symphysis is, therefore, short. The pelvis, as a whole, differs markedly from that of the adult, being somewhat funnel-shaped, and the pelvic brim being very oblique to the horizon. The various measurements of the pelvic diameters are given in great detail. The bladder is almost entirely an abdominal organ at birth. Its normal form, when partially distended, is ovoid, the most important fact being that the broad end is directed downward. The reflection of the peritoneum from the anterior abdominal wall usually takes place a little below the level of the umbilicus. The anterior surface of the bladder is, therefore, entirely uncovered by peritoneum, a fact, in certain cases, of the utmost importance. Posteriorly, the peritoneum passes over the bladder wall, reaching, in the male infant, to a point immediately below the vesicular orifice, and here coming into relation with the small prostate gland, another fact of great importance surgically. In the female infant, the peritoneum does

not descend so low, for its point of reflection on to the anterior uterine wall lies above the level of the internal urethral orifice. The size of the bladder is relatively small. It rarely contains more than a drachm and a half of urine at the time of birth. The ureters lie immediately internal to the external and internal iliac vessels and dip down under the broad ligaments, and rise slightly to open into the bladder at the plane of the brim. The rectum is comparatively large and straight and is placed in a vertical position, which may favor prolapsus recti, a common malady in the infant. The anus is situated relatively posterior to the position it occupies in the adult. A loop of the sigmoid flexure is sometimes found in the pelvis, but it lies chiefly in the abdomen. The author found it, as other observers have, very long, and frequently bent upon itself. The uterus lies partially in the abdominal cavity. The author believes that the vertical position or the position of anteversion represents its normal line in the new-born infant. The position of the ovaries is variable.

—It is worth while to continue a study of borax, for we find it becoming quite a children's remedy. Thus, for instance, we find it comparing with other remedies in the earaches of very young children, where it is distinguished by the nervous excitability which qualifies the pains, each paroxysm of pain causing the child to start violently. Again, another common baby symptom under borax is that the child screams before urinating. The urine has a peculiar pungent, fetid odor. These urinary symptoms remind us of petroselinum, under which there is an inflammatory condition of the bladder. This drug has much the same symptom. "Child has sudden and urgent desire to urinate; if does not, there is great pain, causing it to scream and jump up and down."

—Ashby (*Med. Chron.*) describes a post-mortem on a syphilitic child affected by cerebral softening. There is a natural tendency to refer symptoms arising in a syphilitic patient to syphilis, and it is especially difficult in children to always determine what symptoms are really due to that cause. The part which the poison of the disease plays in producing the brain lesions found during infancy is not readily defined. Chronic hydrocephalus is not uncommon in syphilitic children, but it is rarely influenced by spe-

cific treatment. Chronic meningitis has also been attributed to syphilis, and when it occurs in intra-uterine life there is reason to believe that it is specific in nature. Gummata are rarely found in the brains of infants. The brain lesions most certainly specific are those in which endarteritis occurs, accompanied by thrombosis of the smaller arteries, and a consequent softening of the brain substance. Such cases have been recorded by Barlow and Chiari. They are not common, and every case of the kind is worthy of record. In the case reported by the author the patient was first seen when three months old, and was then suffering from typical syphilitic symptoms. At eight months it began to suffer from convulsions. At first they were confined to the left side, but after a time became general. At eleven months the left side became rigid and the knee reflex was exaggerated. Later the right side also became rigid, the head was retracted, and the child semi-idiotic. It died at fourteen months, of exhaustion. During all this time it was under active specific treatment.

At the post-mortem examination an excess of fluid was found beneath the arachnoid and in the lateral ventricles, but there was no lymph or adhesions. Upon cutting into the gray matter it was found to be very soft. The parts nearest the surface had undergone most change. It was streaked with a white, glistening substance which had undergone fatty degeneration. This was most marked over the right hemisphere. There was also a patch of reddish-brown softening in the right caudate nucleus.

Microscopical examination showed complete fatty degeneration of the gray matter, the caudate cells being discovered with difficulty. The walls of the minute arteries and capillaries were also fatty. The arteries of the pia and the medullary arteries contained thrombi forming a kind of core, which had shrunk away from the walls of the vessels. The arteries showed, in places, evidences of periarteritis, the external coat being thickened, there being an excess of fibroid tissue and nuclei obliterating the perivascular lymph space. This was not confined to the region of any one artery, but was general over the surface of both hemispheres. The author is inclined to regard it as a chronic meningo-encephalitis resulting in softening of the cortex, and possibly, if the child had lived, going on to sclerosis.—*N. Y. Med. Jour.*

● GYNECIC ETCHINGS. ●

—It is stated by Dr. Laroyenne, of Lyons, that whenever, in a suspected surface of the cervix or of the uterus, the finger nail can be sunk into the tissue and some debris removed, we are authorized to affirm that the disease is of an epitheliomatous nature.

—Landau refers to two pathognomonic symptoms of value in the diagnosis of tubal cysts. In hydro-salpinx, the sac—being not alone elastic, but the muscular wall remaining intact to touch—resembles an air cushion, and it may be possible to express this fluid into the uterus and collect it. In purulent tubal cysts, the above mentioned sign is generally lacking, because the muscular wall has its contractility impaired by meso-salpingitis.

—*Antimonium crudum* is indicated for suppression of menses from a cold bath, where there is tenderness in the ovarian region. Here we may compare it with *aconite*. The latter, however, is especially indicated when there is a tendency of the blood to the head or to the chest, with stitching or throbbing pains, palpitation of the heart, frequent flushes of heat with thirst and dizziness or vertigo on rising from a recumbent position. The accompanying gastric derangements of *antimonium crud.*, with the peevish sentimental state, will serve to distinguish from *aconite*.

—Steinschneider (*Berlin klin. Woch.*) publishes the results of his researches, on gonorrhœa in woman, based on the examination of fifty-seven prostitutes: 1. In all cases of blennorrhagia the urethra is the organ most frequently attacked (47 per 100), then comes the cervical mucosa, and finally the uterine mucous membrane and Bartholin's glands. 2. In all cases of recent vaginal gonorrhœa, there also exists urethritis and gonococci are always met in the latter. 3. Long after the gonococci have disappeared from the urethra they are met in the cervix or in the body of the uterus, even when their presence is manifested by no morbid phenomena. 4. The mucosa of the vulva and of the vagina is unfavorable to the colonization of the gonococci. Their existence

in the vaginal secretions is due to migration from the contiguous parts. This immunity is probably due to the thick covering of pavement epithelium, to the acid secretion, and finally to the vital concurrence of the numerous germs normally inhabiting the vagina and which destroy the gonococci.

—Dr. Popow, of St. Petersburg, contributes (*Centralblatt für gyn.*) a study of the alterations of the ovaries in cases of uterine fibromyomata. His conclusions are drawn from fresh preparations of ovaries recently removed. In general, not only may a cystic degeneration of the ovaries be observed, but also an interstitial oovitis and characteristic changes in the histological structure of ovarian envelopes. These researches relate to the examination of the ovaries in forty cases, of which two cases were cavernous myomata. In a microscopic point of view, more than half of the ovaries had undergone an increase in size. For histological examination, the preparations have been hardened in osmic acid, alcohol, and corrosive sublimate, mounted in paraffine and colored by hæmatoxylin, eosine, and picro-carmin. From these different microscopical preparations the following conclusions were drawn :

In the case of uterine fibromyomata, changes in the structure of the ovaries are generally observed. These alterations are more or less pronounced, and are situated either in the ovular layer, in the interstitial tissue, or in the ovarian parenchyma.

An hypertrophy of the stroma of the ovary is generally developed, and, in consequence, an augmentation of the ovarian mass.

This process sometimes comprises the cortical layer of the ovary, sometimes is localized at a determined point, and, sometimes is met along the vessels and nerve fibers. It produces diminution of the lumen of the vessel, thickening of the nerve envelopes, and atrophy of the separate nerve filaments. The ovarian follicles may take a double part in this morbid process, and great augmentation in the volume of the follicles may be observed. Then, each ovary seems composed of small cavities (cystic degeneration), resembling Graafian follicles, in the different states of development. Follicular atresia may be observed. Destruction of the hypertrophied Graafian follicles constitutes

apparently the most frequent result of ovarian diseases (follicular ovaritis.) Finally, in the case of fibro-miomata, the cortical substance of some ovaries presents a considerable vascular development.

—Klein finds from a study of the pregnant fallopian tube that the oviduct sometimes becomes sacculated at the point where the ovum lodges, the ovum thus growing in a diverticulum of the tube. The wall of the tube becomes the more rapidly thinned in consequence of the sacculation. The tubal decidua resembles in the main the uterine. It differs, however, in two respects. It contains, beneath the decidua, cell masses, connective tissue lines corresponding to the construction of normal tubal mucous membrane. It has, furthermore, near the muscularis an overlying zone in which are mingled decidua cells, muscles, and connective tissue bundles.

Between the chorionic villi and the tubal decidua there is an extremely intimate relation. The decidua grows around the ends of the villi, presses upward between the villi, and this intervillous decidua is liable to become necrotic from pressure and from infarctions.

A reflexa was not found. This corresponds with the observations of most authorities.

The transformation of cylindrical epithelium into cubical is a characteristic mark of pregnancy in extra-uterine as it is in uterogestation.

—*CATAMENIAL TOXÆMIA*.—At a meeting of the French Academy of Medicine, M. HENROT (*La Tribune Médicale*, Dec. 4, 1890) remarked that intestinal disorders corresponding to menstrual periods of their nurses were frequently observed in infants. He has met with a case in which an eruption occurred in an infant who had been weaned. The eruption always appeared in the same spot, simultaneously with the supposititious menstrual period during lactations, or with the actual epochs after weaning, that is after physical dependence of the child upon the mother had ceased. Two months after her confinement the mother had suffered from an eruption, which must have profoundly modified her blood, since that fluid communicated special proper-

ties to the milk, which, in its turn, had modified the blood, and, therefore, the constitution of the babe for fifteen or sixteen months.

—*HOT WATER FLUSHING of the Uterus Directly after Delivery.*—ALEXANDER DUKE, F. R. C. P. I., in *Hosp. Gaz.*—In every case of labor I now attend I make it a rule to wash out the uterus directly the placenta has been expelled, either by expression or by the natural efforts, with hot water. The advantages claimed are :

(1) Stimulant to the patient ; (2) produces contraction of uterus, removing shreds of membrane, clots, etc. ; (3) the prevention of "after-pains" ; and last, but not least, setting the practitioner's mind at rest by insuring a permanent contraction of the uterus and a clean and untainted cavity.

The facility with which the uterus can be washed out directly after labor is a strong argument in favor of the proceeding. An endeavor to do so forty-eight hours later will be found much more difficult and not nearly so effective.

In several cases which I had observed while assistant master to the Rotunda Hospital, the sudden rise in temperature (sometimes accompanied with rigors) was entirely due to a portion of membrane or débris of some kind being retained *in utero*, discovered only when that organ had been flushed with hot water.

Nothing can be more mischievous than the plan I have seen adopted by many midwives, viz., that of "making a rope of the membranes." Though not condemned as yet by any of the text-books or manuals for midwives with which I am acquainted, the fact of rotating the placenta when extruded (or nearly so) brings on a uterine contraction, and the membranes which have not left the uterus are gripped by the os or cervix. The twisting is continued till the membranes break, leaving a considerable portion behind, setting up after-pains, which, if not sufficient to expel for good and all the offending portion, allow it to become a source of extreme danger to the patient by subsequent decomposition, as shown by the high temperature, rigors, etc.

I am now so convinced of the value of washing out the uterus with plain hot water (previously brought to boiling point), that I

hope I shall be excused for saying, that in my opinion such should be made a routine treatment in all cases of labor and miscarriage, whether in hospital or private practice. The little additional trouble involved will amply repay the practitioner who adopts this treatment, by whom alone it should be done in all cases.

—*DILATATION instead of the Support of the Perineum.*
—H. B. TRESTRAIL, M. D., in *British Med. Jour.*—The dread of the perineum becoming ruptured during the passage of the child's head led to the practice of supporting it, and this has been more or less done from time immemorial to the present day. A large midwifery experience convinced me many years ago of the fallacy and danger of this practice; and in a paper read before the Obstetrical Society of London, and published in their *Transactions* of 1875, I recommended a diametrically opposite line of treatment, which is certainly followed by far better results. Let us consider for a moment the object we have in view—namely: We want the soft parts of the outlet of the pelvis to dilate, so as to allow of the passage of the child's head without its weakest part rupturing. What does support do? It presses the perineum between the hand on one side and the child's head on the other, so that the more support we give, the more squeezed, thinned out, and lengthened the perineum becomes. No wonder, then, that it frequently gives way. One can hardly imagine anything so likely to favor a rupture as this pressure on both sides. True, the support may delay the advance of the head, but this pressure against the perineum rouses the uterus and makes the pains more violent, so that, if delay is the object sought, direct pressure upon the child's head is infinitely preferable and safer in every way. In cases of ruptured perineum what has occurred? Either the outlet was abnormally unyielding, or there was no time for it to expand, so that the weakest part gave way. The obvious way of preventing this unfortunate result is to dilate the perineum before the child's head reaches it, and practically this is easily effected. One can readily form an opinion as to the necessity for this proceeding by ascertaining the dilatability of the parts, the size of the outlet, the length of the perineum, and the character of the pains. If there is reason to believe that the parts

will not readily yield to the advancing head, they may be gradually dilated by drawing back and expanding the perineum during each pain, first with two and then with three fingers, and keeping up as firm extension as can be borne short of pain, and continued from time to time until the required amount of dilatation has been obtained. By this simple proceeding (1) the pains are strengthened; (2) the latter part of labor is materially shortened, and is far less painful; (3) the perineum is preserved intact.

BOOK REVIEWS.

ORIFICIAL SURGERY. By E. H. PRATT, M. D. Chicago: Halsey Brothers, 1890.

We must confess, in the first place, to a very keen feeling of disappointment, for our expectations had been aroused by the belief that the author of this small work intended to present us with a voluminous treatise on orificial surgery. However, we have still remaining the pleasure of anticipation, for are we not promised in the preface of this work that it is the author's intention to furnish a "thorough and exhaustive text-book upon orificial surgery." The work under criticism is then only to be reviewed in the light of a brochure for the instruction of the beginner in this branch of medicine.

With regard to the first half of the work, that relating to the rectum and to the male sexual apparatus, there is much that is admirable, and the writer is to be congratulated on having been able to compress such a fund of original work into so small a space.

Taking that part of Dr. Pratt's work pertaining to the orificial surgery of the female sexual system, we fail to find much that is new. The greater portion of this division relates to lacerations of the perineum and of the cervix, a subject that is already worn threadbare by discussion. We highly recommend, however, a careful reading of the few pages given to the clitoris and to the urethra.

As a whole the book will be indispensable for the original work that it contains, and especially for that part relating to the diseases of the rectum.

One thing that very much mars the appearance of the printer's work is the want of clearness in the photographic illustrations. In many of the cuts only a confused mass is shown that demonstrates nothing to the reader.

ANNALS OF THE BRITISH HOMŒOPATHIC SOCIETY. London: Keene & Ashwell, 1890.

Our English colleagues are evidently doing good work in our special direction, as this record of their half-yearly work contains several interesting papers. Dr. Day's article on Obstetrics brought out quite a little discussion in which experience with several drugs was recorded. Dr. Neatby gives us *calc.* and *silicia* as of great value in preventing premature births; *arnica*, *secale*, *ignatia*, and gels. as successful in relieving after-pains; and *collinsonia* as very satisfactory in affording relief from constipation. Dr. Blake's paper on "Gonorrhœal infection in women" received considerable criticism, but we quite agree with him in the pessimistic view that he assumes. Dr. Burford's paper and the presidential address by Dr. Carfræ contain numbers of valuable thoughts in the direction of the later advances of gynæcology. Taken as a whole, we are quite proud of the prominent part occupied by our special subjects in this issue of the "Annals."

A PRACTICAL MANUAL OF GYNÆCOLOGY. By G. R. SOUTHWICK, M. D. Boston: Otis Clapp & Son, 1891.

Dr. Southwick's work in its first edition has evidently met the needs of the profession in a very satisfactory manner, for he already presents a second edition for our inspection. A careful revision of the work has evidently been made, and some chapters have been added on massage and on electricity in gynæcology. Looking at this book as a practical work on the homœopathic therapeutics of gynæcological diseases, it must be regarded as a great success and a credit to its author. But we regret that it has seemed necessary in some parts to sacrifice clearness to brevity. In cutting down diseases of the fallopian tubes to six pages, the general practitioner is deprived of much that is practical which should be placed at his disposal. In view, also, of the recent advancement in our knowledge of the relation of tubal diseases to inflammations of the cellular tissue surrounding the

pelvic organs, it is to be deplored that the author has failed to throw the causative influence of salpingitis into greater prominence. We feel, however, that such faults are due to the fact that the author has endeavored to give homœopathic therapeutics the place of prominence that it deserves.

PRACTICAL TREATISE ON ELECTRICITY IN GYNÆCOLOGY. By **EGBERT H. GRANDIN, M. D.,** and **JOSEPHUS H. GUNNING, M. D.** New York : William Wood & Co., 1891.

Though we already have a number of treatises on electricity in gynæcology, a practical work will always be welcome. Dr. Grandin has had an extended experience in diseases of women and his contribution to the use of electricity in this specialty is valuable. Some new forms of electrodes are introduced which will be a help in facilitating every-day work. The chapter on "routine uses" of electricity is one of the best features of the work, especially as it is intensely practical and interspersed with valuable hints. Electrolysis for cancer, a somewhat new subject, receives considerable attention, and Dr. Gunning reports a case in which very favorable results were obtained. The book is concluded by a chapter on electricity in obstetrics.

A TEXT-BOOK OF BACTERIOLOGY. By **CARL FRAENKEL, M. D.** Third edition ; translated and edited by **J. H. LINSLEY, M. D.** New York : William Wood & Co., 1891.

We have occasion to be very grateful to Dr. Linsley for his careful translation of Fraenkel's work, for there has been great need for a complete work on bacteriology. The present book will now place in the hands of those who are taking special interest in this direction, a thoroughly reliable guide to technical and experimental study of the various species of bacteria. No doubt it will afford Americans a chance to follow out Winter's discoveries and researches on the micro-organisms of the female genital canal.

THE CONCORDANCE REPERTORY, vol. v. By **WILLIAM D. GENTRY, M. D.** New York : A. L. Chatterton & Co., 1890.

With the approach of the completion of Gentry's wonderful work, we begin to realize how much homœopathy owes to the

author's labors. We always feel sure now that when a symptom is met with which we are not familiar, it will be easy to find it by turning to our *Concordance*. The present volume deals with the voice, larynx, and trachea ; with the chest, lungs, bronchia, and cough ; with the heart and circulation ; with chill and fever ; with the skin, and with sleep and dreams. None of these have any direct bearing on our specialties, and yet when one wants to look up symptoms that are reflexly produced by uterine disease, this book is certainly valuable to refer to. In comparing remedies we have found it a very great help.

INTERNATIONAL CLINICS : A QUARTERLY OF CLINICAL LECTURES. J. B. LIPPINCOTT, Philadelphia, April, 1891.

This is the inaugural number of the series which J. B. Lippincott will issue quarterly. The idea is exceeding pertinent to the present condition of medical literature and will fill a niche hitherto unoccupied, by bringing the reader into contact with the daily records of hospitals that have previously been inaccessible to the general practitioner. The present issue is bountifully illustrated and contains selections of great value. The work being divided into sections corresponding to the various specialties, we naturally turn to the part in which we find most interest. Gynæcology, Obstetrics, and Pædiatrics are accorded nearly 100 pages, and present such well-known clinical teachers as Matthew D. Mann, J. C. Cameron, Theophilus Parvin, H. T. Byford, William Goodell, Forchheimer, L. Carter Gray, and Sir Dyer Duckworth. These writers all present practical articles, clinical lectures in fact, and therefore so condensed that it is impossible to notice them separately. It is sufficient to say that the work is indispensable to the clinician.

BOOKS AND PAMPHLETS RECEIVED.

THE POST-GRADUATE CLINICAL CHARTS. Arranged and Published by WM. C. BAILEY, M. D., and J. H. LINSLEY, M. D.

This contains, in a separate book for each patient, blank forms for clinical records. The chest and laryngeal diagrams are well executed and the form for case taking is well arranged.

CRUDE AND INFINITESIMAL DOSES. By HENRY SHEFFIELD, M. D., Nashville, Tenn.

The author presents a pamphlet containing within a few pages a number of arguments as to the efficacy of infinitesimal doses. The judicious distribution of a few thousand copies would doubtless be of service in spreading the use of homœopathy among the laity in the South.

STOOP AND ROUND SHOULDERS. By EDWARD R. SNADER, M. D.

Dr. Snader reprints, from the *Hahnemannian Monthly*, a consideration of this subject in relation to chest expansion and phthisis pulmonalis. At the close of the pamphlet the author gives some very practical instructions on the methods to be employed in the restoration of activity to the air cells.

J. B. Lippincott Company will, beginning with April, issue quarterly thereafter a work entitled "International Clinics." This work will comprise the best and most practical clinical lectures on medicine, surgery, gynecology, pædiatrics, dermatology, laryngology, ophthalmology, and otology, delivered in the leading medical colleges of this country, Great Britain, and Canada. These lectures have been reported by competent medical stenographers and thoroughly revised by the professors and lecturers themselves. The object of the work is to furnish the busy practitioner and medical student with the best and most practical clinical instruction, in concise form. Each volume will consist of over 350 octavo pages, illustrated with photographic reproductions of important cases.

HAHNEMANNIAN ANALYSIS-SHEET. By M. A. A. WOLFF, M. D.

An analytical scheme for the purpose of comparing remedies by repertory work.

THE ATMOSPHERIC TRACTOR. By PETER McCahey, M. D.

Reprint from the *Medical and Surgical Reporter*, November 29, 1890. A little pamphlet describing a new instrument devised by the author, consisting of a disc which, applied against the child's head, acts by atmospheric pressure. If capable of performing all that the author claims for it, this instrument will certainly be of the greatest use.

—This issue of the JOURNAL OF OBSTETRICS was delayed by the fire which visited the office of the publishers, A. L. Chaterton & Co.

THE HOMŒOPATHIC JOURNAL OF OBSTETRICS, Gynæcology and Pædology.

A. L. CHATTERTON, EDITOR AND PUBLISHER.

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1. All articles or communications to this journal should be exclusively for its pages.
2. For the convenience of subscribers, this journal will not be discontinued until so ordered.

No. 4.

JULY, 1891.

VOL. XIII.

MECHANISM OF LABOR.*

BY

T. GRISWOLD COMSTOCK, M. D.

ST. LOUIS, MO.

Hæc, dum incipias, gravia sunt,

Dumque ignoras ; ubi cognores facilia.

That which is new and partially known may be difficult ;

A better acquaintance may make it easy.

Introduction.—I beg the Congress to consider and appreciate the fact that the task assigned me is, in point of magnitude and importance, wholly out of proportion to the space and time allotted to the present occasion.

Much, incident to the subject, must be omitted altogether, while such part as we may attempt to treat can receive but scant and insufficient attention.

Few subjects in the whole range of human experience are fraught with such tender, thrilling, and pathetic interest as the fact that a newly born babe has made its advent into the family circle. Both mother and child at once become

* Read before the Homœopathic Congress at Atlantic City.

objects of the deepest solicitude and tenderness, the interest widening and spreading beyond those especially interested to all who may come to a knowledge of the advent. Primarily this feeling is matter of instinct, common to the entire animal creation. In the higher civilization of humanity, the quality of instinct is so largely supplemented as to become a matter of moral, social, and domestic interest and obligation.

In primitive states of life and the social conditions, the attempts at midwifery have doubtless been of a very elementary nature, consisting in some simple provision for the personal comfort of the mother, but with no idea of rendering assistance in the presence of accident or danger.

It is now matter of congratulation that from such primitive beginnings, progress in the obstetric art has so far kept pace with civilization as to claim full equality with the highest phases of human progress in any of the departments of life.

Definition.—We define labor to consist in that process, at full term, by which the child is extruded from the uterine cavity, through the vaginal canal, into the outside world. This process may be normal or abnormal. The average duration of labor, in accordance with the experience of modern authorities, and calculated from a large number of cases, is from eight to ten hours. According to Denman and other old authorities, a labor completed, with safety to mother and child, within twenty-four hours, should be regarded as normal. A little less or even slightly greater length of time, with or without artificial assistance, need not necessarily alter claim to normal classification.

Cause of Labor.—Much time and ingenuity have been expended from time to time in a solution of this question, without any very satisfactory result. For the present we find it convenient to accept the occurrence of labor at the end of the ninth month (or 280 days) as an ultimate fact, precisely as we do many others in the great domain of

physical activity, and for which we can offer no satisfactory explanation. For instance, labor and birth take place at the end of the ninth month, for the same probable reason that growth subsequently ceases at the end of the eighteenth or twentieth year, with a stature of 5 feet 8 inches, and a weight of 150 pounds. If born at the fourth month the child would not be viable; if at the end of the twelfth to the eighteenth month, the mother must have great personal discomfort and even peril, with a foetal volume utterly out of proportion to the diameters and capacity of the parturient canal. Now it would be quite as grotesque and unfit for the individual to grow and increase indefinitely beyond the eighteenth or twentieth year of age. In short, facts are transpiring in chemistry, crystallography, and physiology, on all hands and every minute, for which we have neither adequate explanation or comprehension. The best we can do is to recognize the operation of Nature's wise, but to us inscrutable laws, conducing to beauty, harmony, and the fitness of things.

Presentation.—Presentation has reference to the foetal part found presenting at the middle of the superior strait at the setting up of labor.

Position.—Position has reference to the attitude of the foetal ellipse *in utero*. Until about the middle of the present century the authorities recognized eight normal presentations—four of the vertex and four of the pelvic extremity. At present, the weight of authority is in favor of only four; the first, second, third, and fourth of the cephalic extremity; these being further designated as the left anterior-oblique, the right anterior-oblique, and right and left posterior-oblique.

Frequency.—Leishman says there are only two vertex presentations; the first and second; and of these the second is so infrequent as to constitute it the rare exception to the rule that the presentation will be of the first variety.

Statistics of Cephalic Presentation.—The elder Naegle af-

firms that ninety-nine per cent. of the vertex presentations will be of the first variety. The latest and best authorities, it should be noted, regard these views by Naegle and Leishman as somewhat radical or exaggerated, and not defensible. But after all due allowance, it would seem safe to affirm that the separate and relative anatomy of the pelvis and the foetal head, with the obviously greater frequency of occurrence of the first presentation, all go to show that practically there is but one céphalic presentation, the others being simply exceptions to the rule in favor of the first.

Fifth and Sixth Presentations of the Vertex.—Some authors designate a fifth and sixth vertex presentation, the occiput in the fifth pointing to the pubis, and in the sixth to the promontory of the sacrum. These presentations are probably primarily true, of any or all of the four vertex presentations, as the normal and convenient position of the foetal ellipse would seem to require; that is to say, until labor has fairly begun the foetal spine will look directly forward or backward, and not laterally or obliquely. But as the vertex fairly presents or enters the superior strait, these fifth and sixth positions are quickly converted into one of the other four varieties. In the study of the mechanism of labor it is difficult to keep entirely clear of the management of the same. Indeed, they have so many points in common as to make their consideration jointly both convenient and a necessity.

Position of the Woman.—There is diversity of practice as to the position of the woman in labor, choice being between the left side and the dorsal decubitus, both authority and experience being in favor of the latter. A circumstance decidedly in favor of the dorsal position, is found in the fact that the woman in the second stage turns instinctively to the back position, whatever may have been the earliest position. During the first stage the largest latitude may be allowed as between sitting, standing, walking,

or lying down. But during the second stage method and constraint should be observed by the patient.

Examination—Diagnosis.—In order to study the mechanism and watch the progress of labor intelligently, we should, as soon as labor shall have fairly begun, make careful examination so as to determine the foetal presentation. This we do by palpation, by abdominal exploration, and by digital examination per vaginam. The primary object in such examination will be to determine the foetal part presenting. Incidentally we elicit information as to moisture or dryness, relaxation or rigidity, the progress of labor, and as to the capacity of the parturient canal to admit the passage of the presenting part.

Sources of Power in Labor.—In the first stage of labor, power or agency is furnished by muscular action of the uterine body. In the second and third stages, the diaphragm and abdominal muscles, with voluntary effort of the woman, are added to the uterine effort.

Conditions of Success.—The successful mechanism of labor with any presentation will depend upon conformity to the following conditions, to wit: The axis of the presenting part during descent, whether at the superior strait, in the pelvic cavity, or at the inferior strait, must conform to the axis of these points respectively. With this correspondence of foetal and pelvic axis, there must be a certain succession of flexion, rotation, and extension. Or to present the subject tersely, in accordance with authorities: We have, first, flexion; second, first movement of descent; third, leveling or adjusting movement; fourth, rotation; fifth, second movement of descent and extension; sixth, external rotation. This synopsis does not quite sufficiently include one other condition of success—and that is conformity of the diameter of the presenting part to the longest diameters of the pelvic canal. In a normal case of labor, under the above conditions, the exactness and accuracy with which the whole mechanism and process are completed,

is most beautiful, and to the uninitiated seems almost marvelous. A quaint old Irish practitioner attributed it to foetal instinct.

Conditions Adverse to Success.—We propose to mention three principal sources of hindrance and delay in the progress of labor: inertia uteri, mal-presentation, disproportion of parts concerned. Mal-presentation will receive special attention as we come to notice these separately. Inertia uteri is that passive, inactive condition of the uterus which brings matters to a more or less complete standstill, according to the degree of such inaction. In many cases it is the result of a violent, protracted labor, a simple case of muscular exhaustion; in others the cause is not apparent, as it may happen without any cause of exhaustion. Delay from a disproportion of parts, as between the size of the presenting part and the capacity of the parturient canal, is by no means infrequent.

Ergot.—Formerly, it was much the practice to treat inertia and even slight cases of impaction with heroic doses of ergot. We regret to admit that such injurious and unscientific mode is not quite out of vogue, even now, especially in the country and out of the way places. Let the point be distinctly made, that ergot in the first and second stages of labor is inadmissible under any circumstances, for the important reason that hour-glass contraction, rupture of the uterus, and defective involution are likely to be the result.

Forceps.—I need hardly say to this intelligent body of medical men that the forceps is the remedy in the above class of cases. This instrument, in the hands of skilled experience, is the greatest boon to the parturient woman in trouble, ever invented or provided for her relief. When those of us now seniors were young practitioners, we were gravely advised, when going to attend a case of labor, "to leave the forceps at home, for fear by some misadventure they might fall out of our pocket and slip into the vagina."

Now, the prudent, provident obstetrict always has his obstetrical bag at hand, so as to be in immediate preparation for an emergency. Of course the forceps will be largely applicable to cephalic presentation, but may be in exceptional cases useful in the hands of skill, in breech presentations for delivery of the breech and subsequently the head.

Forceps in Controversy as to Application.—Should the instrument be applied with reference to the foetal presentation, or with reference to the curves and direction of the parturient canal? On this point there is a difference of opinion, with a weight of authority in favor of application without any reference to presentation. Under this rule the child's presenting part may suffer temporary damage, which will be small and unimportant compared to the hurt to the mother if the contrary rule be observed.

Stages of Labor.—The authorities make or recognize three stages of labor: first, second, third. The first embraces the process or stage of dilatation, during which the uterine muscles are brought into firm, close contact with the foetal ellipse; the cervix is obliterated; the os is dilated or becomes dilatable; the thin cervical lips become soft and thin, and are closely applied to the presenting part. If the waters be abundant they bag and present externally to the os, especially during the pain. The pains during this stage are irregular as to time and force, are mainly confined to the back and loins, are of a sharp cutting character, in the language of the old authors called, "grinding pains." The woman is noisy, restless, unhopeful, actually in despair. The termination of this stage is usually marked by the "breaking of the waters." In a dry labor, or with strong membranes, this may not occur until some way in the second stage; with a thin, weak membrane it may occur early in the first stage. With a large child, or with twins, and with a large accumulation of waters, much advantage is gained at the *proper time* from a rupture of the membranes by the obstetrict, if it does not occur spontaneously. The me-

chanical advantage gained is most marked as shown by the rapid setting up of the second stage and the progress made therein. During this stage the presenting part is simply at, but has not engaged the superior strait. How the muscular, uterine activity of this stage should result in dilatation of the os is not quite apparent, but seems to be in harmony with the fact that sphincters relax and open an outlet, at a time when muscular activity and contraction of neighboring and associate parts is in greatest activity, as in the case of the rectum and bladder.

Second Stage of Labor.—At the setting up of this stage—second—marked changes take place. The pains come to the front, become more regular as to time and force, are expulsive, are less painful; woman renders voluntary effort; is more hopeful and becomes obedient to advice. The presenting part quickly engages the superior strait and enters on the series of motions in flexion, rotation, descent, extension, and restitution, and so completes the delivery of the presenting part, to be followed quickly in normal cases by the entire birth or expulsion of the foetus.

Third Stage of Labor.—The third stage of labor includes the expulsion of the placenta and membranes, the clots of blood, and the suitable contraction of the uterus. Occasionally this stage is anticipated by the simultaneous expulsion of the foetus, placenta with unruptured membranes, "waters," and all. Such peremptory haste is undesirable, as being likely to result in violence and lacerations of the soft parts, and hæmorrhage from the uterus. At the conclusion of the second and the setting up of the third stage, care should be taken to see that the cord is not coiled about the body, and especially the neck, which will be found to happen in twenty to twenty-five per cent. of labors. The nurse should always be instructed to remedy this accident, should the birth take place in the absence of the medical attendant.

The Perineum.—The perineal body should always be the

object of attention and solicitude on the part of the physician, as it receives the brunt of violence and pressure at the conclusion of the second stage of labor. It is liable to various degrees of laceration, from a slight "nicking" to a laceration into the rectum and anus. Very few cases of primipara escape at least the slighter form of injury. Formerly we were advised to make pressure upward and forward to prevent accident. It is doubtful if experience has justified the advice. In cases of a threatening character, strong pressure should be made against the entire vulva with folds of flannel dipped in hot water and oil, and, in the absence of a pain, lard may be pushed into the vagina. This last, experience proves, will materially aid the exit of the head. Pressure in this way may delay expulsion of the presenting part until the parts shall have had time to soften and dilate. The woman in the meanwhile should be instructed to cease voluntary effort. A thick, unyielding perineum is at times a source of delay and trouble.

Episiotomy.—In cases of imminent peril from the risk of perineal laceration, it has been my practice for many years to make lateral incisions (episiotomy) in the vulvar ring, to relieve the strain upon the perineum, with suitable antiseptic precautions. These incisions heal readily, usually without suturing, and are certainly a vast improvement upon a badly lacerated perineum. This operation of episiotomy seems to be little known or practiced in this country, but in the celebrated clinics of Vienna and Würzburg, in Germany, where I have been instructed, it is quite the mode in needful cases.

Inspection of the Vulva after Delivery.—In every case, after delivery, careful ocular inspection should be made to ascertain if any damage has been sustained, in order that immediate treatment for repair may be adopted. Slight cases of laceration under cleanliness and the local use of fluid extract of calendula, or the boroglycerides, or cre-

lin,* usually make good recoveries by the end of the puerperal month; more extensive lacerations should be sutured at once, and this should never be neglected.

Cephalic Presentations.—As we have before said, incidentally, there are four varieties of the cephalic or vertex presentations; numbered, in the order of probable frequency, first, second, third, fourth; also designated as the left occipito-anterior, the right occipito-anterior, the right occipito-posterior, and the left occipito-posterior. In each of these the presentation is oblique with reference to the antero-posterior and the lateral diameters of the pelvis. The precise relative frequency of these presentations is a matter in controversy between good authorities. As before stated Nagele affirms that ninety-nine per cent. will be of the first variety.

First Cephalic Presentation.—Leishman states that there are only two varieties, first and second; and that the second is so rare as to constitute an exception to the rule that the presentation will be of the first variety. While experience is largely in favor of these views, many good authorities accept them *cum grano salis*. A correct knowledge as to relative frequency helps much as a start in recognition of the particular presentation in a given case. With this in view if upon vaginal examination we detect two soft spots, with an intervening hard or firm space, pointing to the left acetabulum, and just beyond the hard ovoid occiput, with the face presenting toward the right sacro-iliac articulation, we have to a certainty the first cephalic presentation. This recognition is always matter of much happiness to the obstetrice. For with favorable surroundings as to condition of soft parts, and suitable pelvic capacity, he rationally

* For two years past I have used, in obstetrical practice, creolin. It is quite as good an antiseptic as corrosive sublimate and much safer. It may be employed in all cases where carbolic acid or sublimate is indicated. I employ it in a strength of a teaspoonful to a pint of water. It is suitable for ablutions of the privates, and for vaginal or uterine injections.—T. G. C.

reaches a favorable prognosis and is thus prepared to encourage his patient and her friends. Until the conclusion of the first stage, presentation and the cephalic and pelvic diameters need not enter into a consideration of the mechanism of labor. At the conclusion of the first stage the vertex quickly engages the superior strait and enters upon the succession of flexion, descent, rotation, extension, and restitution, already indicated. Just before extension the brow and chin sweep over the perineum, immediately after which the occiput passes beneath the pubic arch, and by a second act of rotation or restitution is placed against the inner side of the woman's left thigh. Usually, at this point, there is, as it were, a short resting spell. After the expulsion of the head, the second or third pain forces the right shoulder over the perineum, and immediately the left one emerges beneath the pubic arch, when the labor is practically completed so far as the second stage is concerned. The third stage is simple enough, and may be safely left to spontaneous motion, in the absence of any indication as to placental adhesion or uterine hæmorrhage, upon the condition that the process be completed within thirty to sixty minutes.

Second Cephalic Presentation.—The mechanism and motions in the second cephalic presentation are a precise duplicate of the first, with the exception that the occipital vertex points to the right acetabulum, and the act of restitution brings the occiput to the inner side of the woman's right thigh, and the right shoulder passes over the perineum and the left beneath the pubic arch.

Third Cephalic Presentation.—In the third or right occipito-posterior position the occiput points to the right sacroiliac articulation, with the face looking to the left acetabulum.

Fourth Cephalic Presentation.—The fourth position is precisely the reverse of the third as to presenting parts. The same rule in these two presentations obtains as to flexion, descent, rotation, extension, and restitution as in

the first and second positions. Indeed, it is now held by high authorities that by an extreme act of rotation at the inferior strait these two positions are converted into the first or second, the face passing over the perineum and the occiput beneath the pubic arch. In the event of a failure to so convert these positions practically into the first or second, there is a risk that the occiput may pass into the concavity of the sacrum with premature extension, and so furnish what has come to be recognized as the

Occipito-Posterior Position, and one of the most dangerous, difficult, unwelcome occurrences that can happen to patient and practitioner. The serious importance of this vicious position does not seem to have been recognized by the older authors, and even now is somewhat called in question. There is no longer any doubt as to its reality, among practitioners who have thoroughly studied the subject, and especially among those who have had some adverse experience with such cases.

The reason why we have so much trouble in this position, is that it is the exact reverse of the normal position, and much more space is required for the exit of the foetal head, because it has to travel *about three times the distance* that it would in an occipito-anterior position; the head is subjected to more friction, the dorsum of the child lies backward, and as all the forces of the uterus are directed posteriorly, a large amount of force is lost, as with every contraction the foetal head is pressed into the hollow of the sacrum, and in order to get out of this cavity and reach the posterior margin of the vulva, it must continuously work an *up grade* direction. The general management of such a position is to favor flexion of the head so that normal rotation may result; and in the early stage if the diagnosis is made before the membranes have been ruptured, it has been advised, to "place the woman under ether and rectify the position."*

* Prof. Algernon Temple, of Trinity College, Toronto, "Transactions of the Ninth International Medical Congress," vol. ii., p. 498.

Dr. Parvin, in summing up the treatment, says: "Resist the descent of the forehead, letting the occiput alone, is the simplest, safest, surest, manual means of effecting anterior rotation."

Some practitioners have advised that trial should be made with the vectis to rotate the head, or to adjust the forceps and attempt to make rotation, and then extract the head. We have found by experience this advice impracticable, and it is superfluous to add that any such attempts should never be made except by a most skillful obstetrist. We have known such manipulations to do harm.

When the head in this position is greatly distending the perineum and yet cannot pass, chloroform should be given and the *straight* forceps be applied, and if possible the labor be thus terminated.

In some cases this succeeds and a living child may be extracted. When, however, delivery cannot be effected by any means in our power, it is for the practitioner to decide whether he will try and save two lives by making the Cæsarean section, or sacrifice the life of the child by resorting to craniotomy in order to quickly terminate the labor.

In four cases to which I have been called in consultation, three of the children were lost. The mothers were all saved, but in the main had slow recoveries from the delay and exhaustion incident to the difficulty. Some account of my experience with such cases may be found in the *Chicago Clinique* for January, 1889.

Breech or Pelvic Presentations.—Breech or pelvic presentations rank next in point of frequency to the cephalic or vertex presentations. The authorities recognize four varieties, numbered first, second, third, fourth—the left sacro-anterior, the right sacro-anterior, the right sacro-posterior, the left sacro-posterior. In this classification and nomenclature the foetal sacrum is made to play the part of the foetal occiput in the cephalic presentation.

Knee and Footling Presentations.—Knee and footling cases

are usually included under the head of breech cases as being mere modifications of the same.

Frequency of Breech Presentations.—Breech presentations, according to Churchill, occur once in 32 labors. According to Ramsbotham, once in 38.8 labors. Footling cases, once in 92 labors. Knee presentations are exceedingly rare. Madame La Chapelle met but one knee presentation in upward of 3000 cases.

Prognosis.—To the mother breech presentations seem to bring no other trouble than tedium in the first stage of labor. It will readily be perceived that the abrupt, truncated pelvic extremity is less favorable for descent and dilatation than the cone-shaped vertex. The peril to the child is serious. The umbilical cord is subjected to such pressure as may asphyxiate the child. There may be much delay and difficulty in the delivery of the after-coming head. Should the placenta become detached and the head remain undelivered, death comes from want of respiration.

Diagnosis.—A frequent source of perplexity and doubt is to recognize the presentation, especially if the vagina be long and the presenting part high up at or above the pelvic brim. Abdominal palpation and exploration may enable us to find the hard, ovoid head at the fundus of the uterus. Then, by vaginal examination, we should soon be able to detect the anus, the genitals, the ischial tuberosities, the spine of the sacrum. Occasionally we may have the diagnosis further confirmed by finding a portion of meconium on the finger employed in the examination.

Mechanism—Management.—It would be difficult to study mechanism and management in this presentation separately. We shall, therefore, proceed to study them jointly. The first stage and much of the fore part of the second stage should be left, undisturbed, to nature's efforts. The membranes should be left intact as long as possible, or until the presenting breech is well-nigh the pelvic floor. If the presentation of the first variety, the right hip passes over the

perineum first and the left passes under the pubic arch immediately afterward. The expelled breech should be gently supported and slightly elevated by the hand of the attendant. If the pains be vigorous, one or two, at most, will expel the trunk. The umbilical cord, if under pressure, should be drawn to the safest point, against pressure. At this point young practitioners, and sometimes older ones, make the serious mistake of traction on the trunk in order to expedite a delivery of the head. Such indiscreet course will almost surely flex the occiput upon the nape of the neck, attended by extension of the chin from the sternum. The probability of such a plight of matters will be increased by traction between pains. Should we be able to find the chin properly flexed upon the sternum, with a finger in the mouth so as to maintain the flexion, we may, during the pains, if there be serious delay, make cautious experimental tractions on the foetal trunk. During such tractions the trunk should be lifted slightly upward and forward. The attendant, with the finger of the left hand in the mouth to keep the chin flexed, should make strong pressure with the thumb and forefinger of the right hand on the occiput, so as to help maintain flexion of the chin. In the mean while, an assistant should, during each pain and traction, make firm pressure on the hypogastrium from above downward.

Forceps for the After-coming Head.—Should these combined modes fail in delivery, we may try the forceps. It must be confessed, however, that the instrument here does not serve us with quite the same uniformity as in cephalic presentations.

Craniotomy.—In desperate cases if we fail to extract the head, especially where we can be sure of the child's death, craniotomy may be a necessity.

Forceps for Breech Impaction or delay from Inertia.—Should there be serious delay of the breech in the lower strait, the forceps may be useful. Such delay may be from impaction or inertia uteri. The axis-traction forceps of

Farnier, or a breech forceps specially constructed for the purpose, should be used, the blades of which should be long enough to reach above the foetal iliac.

Fillet, Finger, Blunt Hook.—A fillet or a finger or the blunt hook in the groin, may each be serviceable in difficult cases, the blunt hook being open to objection as liable to do injury to the parts unless very gently and cautiously used. After delivery in cases that have required much manipulation and management, the bones of the extremities should be carefully inspected, as fractures of these parts are probable.

Shoulder Presentation.—Under the head of shoulder presentations, it will be convenient to treat and include arm, hand, elbow, and “cross presentations.” A strictly cross or transverse presentation is not probable or feasible. The trunk at or just before the setting up of labor action may be found in the uterus above the os; but as soon as uterine contraction begins the cephalic extremity will tilt into the iliac fossa and the long trunk diameter assumes an oblique position between the transverse and perpendicular uterine diameters. Should the hand, arm, or elbow present, these are merely phases or modifications of shoulder presentations, which is practically the view, or conditions of such cases to be recognized and treated. It is of the very first importance that such recognition should take place at the earliest possible moment, as upon this will largely depend a successful management. Under ignorance and incompetency this opportunity will usually be lost. Such is the difficulty of an early diagnosis, in some cases, that skill and experience may be entrapped into an unfortunate delay.

Frequency and Prognosis.—The average of authorities and experience give a frequency of about 1 case in 250 labors, with a mortality of 1 woman in 10 labors, and a loss of one-half the infants.

Division.—There are two great divisions of shoulder presentations, in one the back of the child looks to the ab-

domen of the mother, in the other the back of the child is turned toward the spine of the mother; each of these is divided into two subsidiary classes, according as the head is placed in the right or left iliac fossa. It will readily be perceived that exact recognition of the points must be of capital importance, as guides in any effort at rectification and management of the vicious position. If we decide to manipulate the head, we should know where to find it; if with the pelvic and feet extremities, we should be advised likewise.

Diagnosis.—Diagnosis, when the parts are all high up or above the superior strait, will for a time be difficult. Information at first will be negative, as to the absence of the head, the breech, the face. Pretty soon we come to recognize a hand, an elbow, the firm ovoid shoulder, the spine of the scapula, the clavicle, with a peculiar elongated bagging of the membranes and water, which, by the way, is more or less true of all the abnormal presentations. We should be especially tender and cautious with the membranes, so as to preserve them intact as long as possible, as efforts of rectification and management may be greatly embarrassed by a premature rupture and consequent discharge.

Causes.—A small child, large uterine cavity, large quantity of the amniotic liquor, irregular spastic uterine action, with foetal conformation, are set down as probable cause or causes of this presentation. Indeed it is highly probable that such an untoward plight of matters contributes largely to all the abnormal presentations. A uterine cavity with just capacity to contain the foetal ellipse snugly, with normal foetal development, and vigorous uterine action may be safely looked to as a safe guarantee against abnormal presentation of any kind.

Management.—There are two remarkable modes of termination which sometimes happen in shoulder presentations.

Spontaneous Change of Position.—"Spontaneous Version,"

"Spontaneous Evolution." The first is much more probable than the second. In spontaneous version the movement converts the case into a cephalic or a pelvic presentation. In spontaneous evolution the foetus is forced through the parturient canal without change of presentation. This result could only happen with a large, roomy pelvis and a womb acting violently on a small child. This mode of termination will most likely result in the death of the child, and laceration and much contusion of the external soft parts of the mother.

The term treatment is scarcely applicable to the presentation. The word management is the better one. We should first attempt rectification by external abdominal manipulation and palpation in connection with effort through the vagina, with the hope and purpose of converting the case into a cephalic or pelvic presentation, in which, if we succeed, we are happily out of trouble, as the further management will be simple enough. Failing in such purpose we pass the hand into the uterine cavity in search of a foot, with a view to bringing down the pelvic foetal extremity. All the qualities of gentleness, prudence, and perseverance will be needed in this attempt, as requisites to success and for the safety of mother and child. If the uterus be acting vigorously, the hand will only be introduced under perseverance and with much difficulty, especially if there be a hand and arm down in the way. An anæsthetic or an anodyne, by temporarily arresting uterine action, may be of much service under serious difficulty.

As a last resort, we should hold in reservation evisceration or the Cæsarean operation.

Face Presentations.—The best authorities pretty generally concur that face presentations are simple normal vertex cases converted into this abnormal state by extension of the chin and flexion of the occiput upon the nape of the neck. There are four of them corresponding to the four of the vertex. The authorities are not quite agreed among

themselves as to frequency. The average probable frequency is about 1 case in 250 labors, being about the same as in shoulder presentations. British practitioners give 1 case in 250 labors, some of them 1 case in 490 labors; the Germans 1 in 169 labors. The British practitioners explain the difference in the fact that the Continental physicians observe the dorsal decubitus in labor, while the English practice the side position of the woman. We doubt the correctness of the explanation.*

Cause.—Doubtless the cause of this mal-presentation is much the same as in shoulder cases and other abnormal presentations, to wit: large uterine cavity, much liquor amnii, small child, spasmodic, irregular, or imperfect uterine contractions. We do not call to mind statistics bearing on the point, but venture to affirm that a face presentation will occur more frequently in multipari than in primipara cases, for the reason that the uterine wall keeps closer company with the foetal ellipse in the latter than in the former.

Diagnosis.—Under a vaginal examination, if we detect a softish surface generally, and ultimately the chin, the mouth, the alveolar process of the nose, the brow pointing to one of the four cardinal points of the vertex, the first mento-dextra posterior; second, mento-laeva posterior; third, mento-laeva anterior; fourth, mento-dextra anterior. Before the time of Madame de Chapelle it was considered impossible to deliver these cases without artificial help. Now the advice is to let them take care of themselves precisely as in vertex cases, so long as matters seem to progress favorably. Of course the foetal diameters presenting are less favorable than in vertex cases, and labor may be correspondingly slower, bringing distress to the mother and more or less peril to the child from delay and the violent uterine pressure necessary for its expulsion. In cases requiring assistance efforts may be made by abdominal

* Want of accuracy in statistics a more probable explanation.

manipulation simultaneously with a concurrent effort through the vagina to rectify the presentation. As a last resort it may be necessary to perform version and so deliver by the breech. Forceps may be made useful in skillful hands. In desperate cases craniotomy may be necessary. The length of the occipito-mental diameter, with tardy or embarrassed rotation at the proper time, is the source of delay and difficulty.

Anæsthetics.—I beg permission to close this paper with a brief allusion to a class of agents that has brought a most helpful and comfortable experience to both the obstetrice and his client. I refer to anæsthetics. In the early days of their discovery, like all other novelties of seeming value and importance, their use was in many cases unnecessary, and in others very hurtful. Even now, after forty years of practical experience, it is to be feared that we are not at all times fairly within the lines of a conservative prudence in their use.

Never use in First Stage of Labor.—With very rare exceptions they should never be used in the first stage of labor. Such early use, while being unnecessary, if kept up to the conclusion of labor will result in much nervous and gastric disorder and in death from melæna, as I have seen in one case in a primipara. To many persons their use is most congenial and comfortable; in other cases we have found that they seemed apparently to arrest the pains at any stage of labor and have to be discontinued altogether. In the main their use should be confined to that part of the second stage, when the presenting part begins to impinge so fearfully upon the maternal soft parts. The choice between chloroform and sulphuric ether is still a matter *sub-judice*. A matter of paramount importance is the selection of a subject whose pulmonary and cardiac conditions may render any anæsthetic admissible.

TREATMENT OF SOME OF THE COMPLICATIONS INCIDENT TO PREGNANCY AND PARTURITION.

BY

C. HOYT, M. D.

CHILLICOTHE, O.

Morning Sickness.—This is a very frequent and often very persistent complication, and one that will often put the physician's skill to a very severe test, as frequently the best indicated remedies fail to give relief. Such cases should be carefully examined for every deviation from the normal in the position of the womb, or any disease of the os, such as ulceration or undue contraction of the external or internal os uteri, and, if found necessary, practice gentle and careful dilatation. It is claimed by some authorities that dilatation of the os uteri is almost the only treatment needed and will cure nearly every case, besides being a quick and safe method of cure. In persistent cases advise the patient to take a cup of tea, coffee, or cocoa and something light to eat half an hour before rising. This simple means will often correct the trouble.

The following remedies are especially indicated, but any remedy in the materia medica may become the proper one in certain cases.

Cocculus.—Nausea felt in the head; faintness on rising; colic, and diarrhœa.

Ipecac.—Incessant nausea, not a moment's relief, with colic and diarrhœa.

Lobelia.—Nausea and vomiting with profuse salivation. Asthmatic sufferings.

Nux vomica.—Constipation; restless sleep after 3 A. M.; cross and irritable. The victims of drugs and all sorts of hot mixtures.

Pulsatilla.—Very bad taste in the mouth in the morning; vomiting worse in the evening and at night; diarrhœa worse at night; no thirst; weeping and despondent.

Veratrum alb.—Violent and profuse vomiting and diarrhœa; cold sweat; feels very weak and faint.

Arsenicum.—Great thirst for small quantities of water, frequently repeated. Burning pain in stomach, and dark stools. Great weakness and restlessness; aggravations after 10 A. M.

Sepia.—Great sense of emptiness at pit of stomach; yellowness of face and across bridge of nose. The washer-woman's remedy. Her whole condition aggravated by doing laundry work.

Albuminuria, Uræmia, Dropsy, and Œdema of the Feet.—Traces of albumen are to be found in the urine of almost every pregnant woman, especially in the latter months of gestation, yet its presence in any great quantities must always be looked upon with alarm. Where there is considerable œdema of the lower extremities it is always best to test the urine for albumen, and if found in any considerable quantities to institute treatment for the relief of the same.

Some one of the following remedies is likely to be indicated for these various conditions:

Apis.—Absence of thirst is very characteristic of apis mel. in uterine dropsy; stinging pains as of bee stings; swelling of the feet, hands, and eyelids.

Apoc. cann.—Ascites; great thirst; diarrhœa; muddy urine.

I have always derived the best results from doses of from five to ten drops of the mother tincture.

Arsenicum.—The face looks pale and waxy, or greenish. Weakness and prostration, with great thirst and diarrhœa. Fear of death.

Digitalis.—Dropsy where the heart sympathizes. Pulse intermittent, omits every third beat.

Many other remedies are likely to be needed in the treat-

ment of these cases, for the indications of which I refer you to the *materia medica*.

Uterine Displacements.—Malpositions requiring special treatment are comparatively rare during pregnancy, if we except cases of retroversion occurring in the earlier months, and anteversion in the later months. When displacements are found to exist they should be rectified and the indicated remedy given, and, if necessary to relieve the case, a suitable pessary or abdominal support should be applied until the case is far enough advanced to make such helps no longer necessary.

Sometimes a short rest in bed in a position best suited to correct the malposition will be all that is needed after the displacement has been corrected.

Varicose Veins.—This is quite a common trouble during pregnancy, and one very promptly relieved by homœopathic treatment. Sometimes a judiciously applied bandage to the limbs gives support and comfort, but the *similia* is the great desideratum and always brings a prompt answer.

Hamamelis and Pulsatilla, especially the latter, will be found to be the most frequently indicated remedies in this trouble, and for full indications for these and other remedies I refer you to your *materia medica* and works on practice.

Insomnia.—Sleeplessness is quite a common trouble during pregnancy, and usually has for its cause something that can easily be found out and usually corrected. The habits of the patient should be carefully examined and the faulty ones corrected, and all sources of irritation and unhappiness removed so far as possible. She should be given proper advice in regard to bathing and exercise and diet, and when this has been attended to, if she still cannot sleep she is in need of medication, and should be carefully examined and given the indicated remedy, which will remove all further traces of the trouble.

The Pains of Labor.—The variations in labor pains from

what we consider normal are very frequent and often very troublesome, as well as very difficult to account for, and in order to bring about a normal condition we must select and give to the patient the indicated remedy. Almost any remedy in the materia medica may prove to be the proper one, but the principal ones likely to be found indicated for abnormal pains, rigid and contracted os, and such abnormal conditions as we are likely to find in otherwise normal labors, will be comprised in the following list, *viz.*, aconite, belladonna, gelsemium, chamomilla, caulophyllum, pulsatilla, coffee, kali. carb., and sepia.

Post-partum Hæmorrhage.—While this is a very dangerous and frightful sequel of labor, by coolness and presence of mind the physician is usually master of the situation, and is able in a very short time to have the case completely in hand and under control. As soon as it is discovered that a woman is flooding, the physician should carefully pass one hand into the womb, turn out the clots, and remove any portion of the placenta that may be found; with the other hand make firm and steady pressure and compression over the fundus until the womb is made to contract firmly.

If hot water and a fountain syringe are at hand, and the wasting inclined to continue, it is well to direct a stream of water at a temperature of about 115° into the cavity of the womb, which will usually have the desired effect in stopping the hæmorrhage.

Give lemon juice or vinegar in water, or the indicated remedy, whether it be ipecac, belladonna, secale, sabina, etc. But the principal thing is to keep a cool head and know what to do and how to do it.

Retained Placenta.—If the placenta is not expelled, after the usual efforts to cause its detachment and, after waiting a reasonable length of time providing, there is no hæmorrhage, it is a good rule to prescribe the indicated remedy, usually either pulsatilla or cantharis, and then wait for results.

If it is not expelled in a very few hours then it is usually best to remove it by passing the hand into the womb, and peeling the placenta from its attachments.

If the womb is followed down by the hand and steadily compressed during the second stage of labor, retained placenta will be found to be of very rare occurrence.

Retention of Urine after Delivery.—This is not a very uncommon condition after long and tedious labors, and can be usually overcome by the indicated remedy, which in a large number of cases will be found to be arsenicum. This drug corresponds particularly to that condition of over-exertion that accompanies a difficult labor. Other remedies, such as hyoscyamus, belladonna, arnica, coca, etc., may be required in certain cases where they seem to be indicated. When remedies fail resort must be had to the catheter until the bladder regains its normal condition.

Sore Nipples.—Pratt, in his late work on Orificial Surgery, says: "After childbirth, cracked nipples are of very common occurrence. They are usually attributed to the baby, and every effort is made and every care is taken to protect the nipples from the baby's mouth by means of rubber shields of various designs, and great varieties of local applications are employed to heal them, usually with unsatisfactory results, simply because the physician is fighting effects, and failing to recognize that the cause is not in the breasts or in the baby, but in the endometrium. A single careful swabbing and douching of the uterine cavity will almost invariably cure the most aggravated case of cracked nipples inside of three days' time." If this statement be true, the usual remedies and appliances in cases of sore nipples are misdirected and entirely unnecessary, and likely to do about as much harm as good. A great variety of remedies and applications are advised for use in this affection, such as brandy and sugar, green tea, collodion, alum, tannin, hydrastis, calendula, arnica, etc., and such constitutional remedy or remedies as may seem indicated in each case.

Some advise mixing with water the same remedy given internally and applying to the nipples.

I think, in these cases of sore nipples, we should treat the cause instead of the effect.

Dr. Pratt also says that he has not seen a case of benign tumor of the breast for years, that he has not been able to cure in a very short time by directing his treatment entirely to some diseased condition of the womb.

PREGNANCY.*

BY

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In surveying the subject assigned me, I feel something as a person away back in Connecticut might feel, when, standing for the first time upon the top of the Absecon Lighthouse and looking down, he beholds "three thousand miles of emerald ocean pounding on eight miles of silver beach." I can only say, as a discouraged Spanish student once said to me, when out of patience with our grammar: "Why, the immortal Shakespeare, when he wrote a letter to George Washington, brokee he pen on the table, and say, 'This language am too poor to express my poetical feeling!'"

But I will not attempt to occupy all the latitude accorded me, and my paper will resemble the "emerald" of the ocean rather than its depth.

My communication must be somewhat desultory, as my object is, firstly, to suggest the wisdom of relieving many of the discomforts of pregnancy without medicine, and

* Read before the Homœopathic Congress.

secondly, to bear witness to the efficacy of our homœopathic remedies where medication is required. Many apparent maladies of gestation are physiological, while similar ones appearing in a non-pregnant patient would be pathological and even alarming; and while pregnancy is not in itself a morbid condition, it has a tendency to develop any latent dyscrasia, and thus we oftentimes get the "disorders that complicate pregnancy."

To defective household hygiene, to unkind and thoughtless husbands, to unwise and garrulous neighbors, to badly appointed tables, and to the mistakes of dress, we may, I think, impute the majority of the ills of procreation; and if we could but supervise the husbands, the wardrobes, the tables, and above all the gossips, the disorders under consideration would materially diminish.

Unfortunately, the busy obstetrician *encourages* a morbid habit by exhibiting remedies, instead of pausing to kindly direct the often frightened girl-woman out from a kind of superstitious darkness which envelops her, into a rational understanding of herself and her condition. Time spent to thus instruct a patient seems to me less "elaborately thrown away," than in attempting to determine the sex of child *in utero*, or estimate the pulsations of the foetal heart; and sometimes I think the welfare of a patient is compromised by the pedantic display of stethoscopes and questionable intra-uterine injections. In this age of enlightenment, and this country of culture, we should not seek to simulate the customs of the old Japanese accoucheurs, who, after the fifth month, call every day, *ostensibly* to reduce surmised irregular presentations by mysterious manipulations, but *actually* to increase their revenue. If remedies are indicated as auxiliary, the law of similars is "the same yesterday, to-day, and forever"; and the same carefully selected remedies should be chosen as would appeal to similar complaints at any other period. I have often said to a patient who, discovering her plight, comes for orders, "Forget your

condition and do just as you would do if not conscious of it, always refraining from reaching, jumping, and Barnum's show."

I believe it is quite generally admitted that surgical operations during gestation are not attended with any extraordinary degree of danger. This opinion is based upon review of medical literature and not upon personal experience, and as it has been said that "our cleverest theorists are rarely dexterous," I will not god-mother the assertion; but I consider that in case of a rapidly growing tumor, removal is wiser than premature delivery. To leave the foreign growth and destroy the vital foetus always reminds me of the old lady whose dear little doggy got his head in her milk pitcher and could not extricate himself. In distress the old lady argued, "I *can* keep house without my dear little doggy, but I *cannot* keep house without my milk pitcher"; so she cut the puppy's head off, and afterward was obliged to break her pitcher to get it out. We have seen that cases of fracture or accidental injury heal as readily when complicated with pregnancy as in the non-pregnant. We have a case on record where the foetus was killed *in utero* by a pistol shot through the abdomen of the mother, and a good delivery and recovery ensued. I recall a case in my own practice where a young woman, riding in her carriage, was picked up by a passing train (I suppose she "didn't know it was loaded") and thrown over the telegraph wires into a gravel pit, while there wasn't enough of the horse and carriage left for the coroner to place under a microscope. I was immediately summoned and found her suffering from shock, a broken jaw, and several bruises and contusions. I packed her in hot arnica, gave the 3d dilution internally, invited a dentist to repair her mouth, and expected every moment that labor would obtain, but she recovered, and no unfavorable symptom intervened, and at the full term of gestation I delivered her of a vigorous child.

The term "enceinte," although French, comes to us from "incinct," of the Romans, and means to them, "unbound"; the Roman women always wearing a cincture or girdle until pregnant, and then removing it, leaving themselves unbound. Now laced corsets have been commended as benefiting the world at large by killing off the foolish girls, but they should be prohibited during pregnancy, for such pressure not only induces cough and hastened respiration and cardiac contractions from pressure upward, and varicose veins from pressure downward, but is a fruitful source of abnormal presentations and even deformed offspring and *favours prolapsus* and inversion of uterus.

Goitre seems to be closely allied to the diseases of the generative organs, seldom appearing before puberty, often expanding during each menstrual period, and developing with pregnancy.

It is one of the things to be let alone, and it will take care of itself when the excitant factor is removed.

Many cases of cerebral congestion are dependent upon constipation, and would be *nil* if the constipation were cured; and fifty per cent. of the cases of constipation are due to gastric derangements. And right here I will spend a moment upon the battered subject of gastric disturbance and vomiting during pregnancy.

Where cervicitis exists, it is a potent factor in producing sick stomach and its train of subjective phenomena, and a bland topical application to the diseased surface leads more rapidly to relief than remedies without local treatment. The spraying of ether over epigastric region and corresponding portion of spinal column has many advocates, but I consider the benefit to be so transient as not to be worth the time. Roasted maize or Indian corn, "popped" and eaten freely with salt, is of most utility in some cases, but perhaps the most popular treatment to-day for this complaint is Copeman's method of dilating the external os—a procedure to be reprehended as frequently disastrous to the

foetus. In *all* cases, rest the stomach and administer nutritious enemata; and, after all, I think we frequently prescribe just as the uterus rises in the pelvis and nature heals the upheaval, and *we* get the credit.

The "longings" of pregnancy about which we hear so much, I confess to not being in sympathy with. Some of our women, I fear me, take advantage of their condition to "long" for favorite but forbidden luxuries. One lady told me months before she conceived, what she *would* long for *if* pregnant, as it was a soup that her husband prohibited from his table; and verily she longed and was supplied with her forbidden condiment, and so her child was not marked by diamond-backed turtles. The discolored patches that mothers will tell us are "strawberries and grapes," often resemble a liver pad about as closely as they do the fruits named.

In the insomnia of pregnancy avoid stimuli and excitants of any description, as also anodynes and hypnotics; advise massage and such exercise as can be indulged in at the least expense to vital power. This counsel cannot be overestimated.

Again, many pregnant women do not bathe much oftener than the Queen of Madagascar, and stay indoors during the last few weeks as closely and religiously as the Zenana women of India. They need oxygen internally and H_2O externally.

The use of castor oil in the last weeks of pregnancy is very common, but not very proper. I suppose every practitioner meets it and must admit its use or contend against it; while it undoubtedly reduces the rigidity of the os, it excites uterine contractions and so precipitates parturition. Let us stand against such interference even though it be proven that Hippocrates gave castor oil to the Greeks, and it *moved* them to the "tug of war."

Another deplorable "kink" the "old wyves" advocate is the oiling the abdomen, imagining it promotes easier labor.

I cannot think so, and am sure it makes the abdominal muscles flabby and less capable of shapely contractions. Instead of allowing such waste of ointment, it better be "sold for two pence and given to the poor" for a homœopathic hospital in Connecticut.

Even anæmia, which more nearly approaches a disease than most of the complaints of pregnancy, is often the result of mal-nutrition of nerve centers, and is often more surely relieved by proper food, congenial companionship, and plenty of fresh country air, than by medication or even the iron and arsenic of the old school. So the œdema of the lower extremities, without kidney complications, might always be cured, if doctors could furnish rest, well-directed massage, and recumbent position, in place of hydrogogue cathartics so often resorted to.

Now, while I have borne upon the many difficulties arising in pregnancy which demand our kindly advice and teaching, do not understand me to think that all the occurring discomforts can be met and dispelled in this way. Far from it; but the law of similars will take care of the balance.

As a practical verification: Early in my practice a young woman came to me who had borne five children under allopathic guidance. Four had suffered from tinca capitis, then pulmonary and enteric irritations, and then collapse. Our valuable vital statistics would very likely show us that "heart failure" set in as a secondary cause of death. The fifth one pulled through, but *one* eye was sacrificed to heredity. At the beginning of her sixth pregnancy she came to me for help. I put her upon antipsorics and kept her upon them, and as a result a healthy boy was born and he is now twelve years old. Three years later, after another eight months of faithful medication, she was repaid by the birth of another vigorous child, who is still living. These two never developed the family eczema, and I believe are entirely indebted to Hahnemann for their lives. Had Lord Byron lived to-day he might have said:

O, Christ! it is a goodly sight to see
What Hahnemann hath done for this delightful land.

At another time an extremely modest, well-controlled, quiet lady of culture came to me in the third month of pregnancy, and with shame recounted her hallucinations and sexual excitements, "so full of fearful dreams and ugly sights," which were typical characteristics of stramonium, with its train of neurotic indices. I gave her stramonium, 3d dilution, and in less than ten days she was rejoicing to find herself free from her unnatural and frightful delirium.

I have often found myself giving indicated remedies *faithlessly*, and have marveled at the relief they brought.

The adherent stool of aluminum, the fidgety feet of zincum the white tongue of antimonium crudum, the brick sediment of lycopodium, the heart-burn and regurgitation of phos., are beacon lights, and will not mislead you; and were I launching my craft on the sea of medicine to-day, instead of pulling for the shore to lie up for repairs, I would get my Materia Medica where I could use it without gaslight or spectacles.

MEDDLESOME UTERINE TREATMENT.

BY

A. W. REDDISH, M. D.

SIDNEY, O.

Mrs. G., æt. twenty-six years, the mother of three children, the last two of which I delivered, came to me in the early part of 1890 with the history of uterine disease. After treating her with variable success for several months, I proposed an examination, to which she consented; and on

April 13 the speculum was introduced and a large erosion found on the cervix uteri. The cervix was dilated to a No. 15½ (Pratt's graded sound), and the uterus was found to be three inches in length, and not much congested. The uterus and cervical canal were thoroughly wiped out with Churchill's tincture of iodine, and chromic acid, 20 per cent., was applied to erosion of cervix. On June 1 the application was repeated, when the erosion on the cervix was found to be nearly healed. Nothing more was seen of the patient until August 16, when arrangements were made to repeat the treatment the next day. She had been much improved by the former treatments, but had felt worse the last month, and wanted them repeated.

I advise my professional brethren to examine their cases more carefully than I did this one, before sounding the uterus. On this occasion I dilated the internal os to a No. 15½ sound, and found a uterus five inches long. I immediately accused the patient of recovering from a miscarriage, which she resented with indignation.

I knew no cause for this enlarged uterus, which was only three inches in depth at my first and second examinations, unless it was that my sounds had failed to penetrate to the fundus; and this I gave as a possible reason. There were no intra-uterine growths.

The former applications were now repeated. I was soon annoyed by the patient's frequent complaints that her menstruation failed to appear. She then told me that she menstruated last on June 15, and had had symptoms of nausea in July (these had been carefully kept from me until after the treatment).

I told her that she was pregnant beyond a doubt, and had been at time of treatment. I could not explain why miscarriage had not taken place. On March 16 a ten-pound boy was born without the loss of a limb, 211 days after his iodine bath.

DAMAGED UTERINE APPENDAGES AND THEIR TREATMENT.*

BY

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It is only within comparatively recent times that the existence of damaged uterine appendages has been recognized, or their connection with pelvic pathology appreciated; more recently still have means been proposed for their cure. With this particular development of gynecology, the name of Lawson Tait will always be associated, and we, as surgeons, owe this courageous man a debt that can alone be paid by the successes with which we meet in treating suffering womankind. Mr. Tait is one of the most remarkable men with whom I have been brought in contact. Self-confidence and fearlessness form the keystone of his work, and his success; without them he could accomplish nothing; with them he has revolutionized his own department of surgery.

The term damaged appendages, of course, includes a previous or present disease of these organs, but the damage here refers more especially to their functional activity, not so much to their structural alteration—two conditions that may be entirely distinct, though frequently one overlaps the other; the following remarks, therefore, do not include diseases of the uterus, as fibroid tumors, or infantile uterus, for which the ovaries and tubes require to be treated; nor do they refer to neurotic conditions induced by and under the control of the reproductive organs. In such cases, treatment is directed to the ovaries and tubes, upon the belief

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that their activity induces or continues morbid conditions in other organs, and not because of any disease *per se*. It is, therefore, the function of the organ that we desire to control, not an organ necessarily diseased, that we aim to cure.

When the appendages are damaged the conditions are quite different. The uterus may, and usually does remain healthy, at least in the early stages of the disease, the pathology residing in the ovaries and tubes. This interferes with functional activity in two directions. First, there are the subjective symptoms of painful menstruation, and second, sterility, for the ovaries and tubes that are properly classified as damaged are incapable of healthy ovulation, and do not present the conditions essential for impregnation. That ovulation may take place in damaged ovaries is very probable; that impregnation is possible with a damaged tube there is every reason to believe, but both circumstances are to be regretted. The ovum from such an ovary, dropping into the abdominal cavity, must be looked upon as a focus for disease, and if one finds its way into the uterus and becomes impregnated its future development cannot be along the line of health; and if, as I believe not infrequently occurs, the unhealthy ovum is arrested in the fallopian tube, we have extra-uterine, or tubal pregnancy to deal with. Truly, complete sterility would be preferable.

The etiology of damaged uterine appendages includes either congenital defect or a history of some degree or form of inflammation. If congenital, the defect is usually in the direction of malformation, probably rarely of non-development, for in the latter case the uterus shares in the arrested development, and we have examples of infantile uterus. From my own observation, I have been led to believe that the fallopian tube is more frequently malformed than the ovary, and that this malformation has as its initial error, whatever else may develop from it, a persistence of the convolutions that the tube has as it descends into the pelvis.

These convolutions remain with more or less definiteness until puberty; the tube then becomes straight, and is thus fitted to maintain a communication between the ovary and uterus. Quite recently I removed an appendage that illustrated this variety of malformation. The patient was married but had never been pregnant. Menstruation had always been extremely painful. In addition to a cystic and adherent ovary—there had been peritonitis—I found a tube perfectly developed, but convoluted. The twists resembled those of a fallopian tube before puberty, and were, from their arrangement in the broad ligament, undoubtedly a persistence of that condition. I have met with several similar instances, but this one was the most pronounced that has come under my observation.

Acquired damage of the uterine adnexa may usually be traced to some form of inflammation. Here we open a broad field for investigation, but for practical purposes, we may divide these inflammations into specific and non-specific. In the first class we place gonorrhœa; in the second, any conditions, simple or septic, capable of producing local or general peritonitis.

Gonorrhœa undoubtedly plays an important part in the history of damaged uterine appendages. Especially is this true of cases in which the principal lesion exists in the fallopian tube—salpingitis, pyo-salpinx and occlusion. I have rarely found a genuine pyo-salpinx, where there was not a possibility of specific injection. I do not deny that such may exist. Injudicious intra-uterine medication may set up such an inflammation, which, being communicated to the fallopian tubes, is followed by suppuration and circumscribed pus formation. There is a specific inflammation of the fallopian tubes, as truly as there is a specific inflammation of the urethra; and as we have a non-specific inflammation of the urethra, so also may we have a non-specific inflammation of the fallopian tubes. Clinically I think the former is the most frequent, but that the latter

may occur and run a course in the acute stage, scarcely to be distinguished from gonorrhœal inflammation, is confirmed by increasing observations. These non-specific cases of pyosalpinx are quite distinct from disease of the uterine adnexa that result from peritonitis. The morbid process begins in the fallopian tube, the lining of which shares with other serous surfaces the pus-forming property, and undoubtedly under conditions which cannot now be well defined, may set in action pathological changes that result in suppuration.

Peritonitis, and its attendant cellulitis, almost always leave some trace upon the ovaries and tubes, varying in extent with the intensity of the initial lesion. That many of these cases have to do with the puerperal state we all know. There is a metritis, and this is usually septic, followed by inflammation of the uterine appendages. Sometimes a single attack is sufficient to cause irreparable damage to the ovaries and tubes; more frequently one attack of peritonitis predisposes to others, and then the ovaries and tubes can scarcely escape the most serious consequences.

When the case has reached the stage of diagnosis, that is, when we can say with assurance that the appendages are damaged, that they are not only diseased, but are unable to properly perform their function, the pathology is associated with adhesions, more or less extensive, of the ovary and tube, or of one without the other. These adhesions are of no definite form. I have seen them contracted with almost every organ and part of the pelvis, though more frequently in severe cases the fallopian tube is bent, and its fimbria adherent to the ovary, and the ovary fastened behind and below the broad ligament.

I have not been able to trace any constant relation between the extent of the adhesions and the degree of suffering that exists. As a rule, the area and density of the adhesions go hand in hand with the objective symptoms, but I have known it to be otherwise. Appendages but

slightly adherent have been the seat of the most intense suffering, and conversely. In this connection I have observed several interesting clinical facts. In some instances the side that presented the gravest anatomical lesions was not the side in which the most severe suffering was felt. That this has been due to sympathy or reflex action is proven by the entire relief that followed the removal of the diseased appendage. Then, again, the cases that have presented the densest adhesions are those that make the best recoveries. I do not mean by this the easiest recoveries, but the most perfect and satisfactory, so far as relief of suffering is concerned. I offer no explanation of this, save possibly that the more complete disturbance of the pelvic circulation that the separation of extensive adhesions involves, is an element in the restoration of pelvic health, it being necessary to divert the blood from former and abnormal channels, and to remove a surplus of nourishment from certain locations that have become centers of pain. While in the majority of cases adhesions form an important part of the pathology of damaged uterine appendages, there are some cases in which no adhesions exist, but the ovary becomes somewhat contracted and filled with small cysts, and the tube becomes very hard, and loses its flexibility. This condition is easily diagnosed. The ovary lies quite low, and is, when pressed with the finger, excessively sensitive, and the tube feels like a piece of whip cord in the pelvis. The lower border of the broad ligament may be easily defined, indeed all the uterine ligaments are more or less tense and infiltrated. Ovaries in this condition are incapable of normal ovulation, and generally give rise to the most intense suffering—pain that is not confined to the region of the damaged appendage, but of a reflex character, affecting almost any organ or part of the body. This form of damaged uterine appendage also may arise from inflammation which does not proceed to plastic exudation, but which interferes with the nourishment of the organs by occluding the blood-

channels. It may also have its origin in imperfect nutrition which dates from the period of puberty.

I have seen several cases of small contracted ovaries and hardened tubes that could without doubt be traced to an attack of scarlet fever before puberty. The changes so wrought upon the reproductive glands are not active, and pass unnoticed, but when the menstrual function is established, or later, when the placenta-forming function of the uterus becomes more fully developed, the appendages are found to be abnormally small and highly sensitive, and the tubes as we have already described them. With such an etiology, both appendages are usually affected, menstruation is extremely painful, and the patient is sterile.

The treatment of damaged uterine appendages falls into three divisions :

- a.* With medicine, including local treatment.
- b.* With electricity.
- c.* By laparotomy.

When I consider the pathology of any one of the forms of damaged uterine appendages that have been mentioned, I feel little confidence in the power of medicine to break up adhesions of the ovary and fallopian tubes, or to restore the normal condition of the cirrhotic ovary that has been associated with scarlet fever, or other exanthematic diseases occurring during childhood.

Nor do I find aught in experience or medical literature to make it probable that a pyo-salpinx, or a hydro-salpinx, is amenable to medicinal action. Internal treatment, combined with local treatment, may control congestion and possibly prevent the further progress of the disease, but here the power of drugs ceases, and the disease must be dealt with upon other grounds. I therefore do not consider myself justified in consuming much time with either internal or local medication in the treatment of damaged uterine appendages. It will be remembered that I am here speak-

ing of the conditions as defined at the beginning of this paper.

With the use of electricity in the treatment of damaged uterine adnexa, I have had some experience. This has been gained from my own practice, but in a more extended way from the practice of other surgeons who have applied this method more extensively than I have done. I have not seen a damaged uterine appendage cured with electricity, but I have seen a large number of cases that I have thought were aggravated by its use, and I have operated upon many cases that I am convinced were complicated and made more difficult from having been first treated by this method. Temporary relief of suffering may be obtained, but I have not known the true pathology to be reached. Adhesions are not broken up, pus, if dissipated,—which I doubt,—not prevented from reaccumulating, ovaries are not developed, or fallopian tubes rendered patulous. In my own practice, therefore, I am obliged to exclude electricity from the treatment of damaged uterine appendages.

There now remains to consider the treatment of damaged uterine appendages by their removal. No surgeon will resort to this measure until he is satisfied that nothing less radical will effect a cure, but I think that laparotomy is frequently delayed longer than is wise or best for the patient. We hear too much, nowadays, of needless mutilation, and over zeal for operations. As surgeons true to our art and to the patients who confide themselves to our care, we can only plead mistakes in judgment, and these mistakes will be less frequent with increasing knowledge. I believe the principle of removal to be correct. The question turns upon the selection of cases, and this will be more accurate with a better understanding of pathology and greater skill in diagnosis.

A uterine appendage, damaged, as we have described it, has its function destroyed, or what is worse, impaired so that impregnation, if it occurs, is imperfect, which tells upon the

offspring more than upon the mother. Removal, therefore, of the damaged organs, cannot in any way affect the child-bearing function, for this is already destroyed, and it is now well proven that the operation in no sense unsexes a woman.

The mortality from the operation is at present reduced to about two per cent., and in some instances even this insignificant figure is less than may be expected from leaving the diseased organs in the pelvis.

The expectant view of a laparotomy for damaged uterine appendages is apt to be overlooked, but it is by no means among the least important ones to consider, for not only is the disease likely to spread from the side first attacked, but fatal results are to be expected from the rupture of abscesses situated in ovaries and tubes.

My advocacy, therefore, of removal of the damaged uterine appendages in opposition to other methods of treatment, rests upon the following:

I. The restoration of function by other methods of treatment is very uncertain if not impossible. The organs may in consequence be looked upon as entirely useless, or harmful, inasmuch as imperfect impregnation may take place.

II. The presence of the diseased organs in the pelvis may become a constant menace to health, and even life.

III. Laparotomy is the most certain and rapid means of effecting a cure.

In a large proportion of the cases suitable for laparotomy, the operation has been followed by favorable results, that is, suffering has been relieved and a very probable danger averted, which alone is a justification for the more radical treatment. But in some instances the results are disappointing, so far as relief from suffering is concerned.

Among other causes, these failures frequently result from:

1. Improperly selected cases.
2. From a faulty technique.

3. From a forced convalescence, by which I mean allowing the patient to rise too soon and not giving her sufficient time to recover from the operation, or for the system to accommodate itself to the sudden change forced upon it.

As we have before said, with increasing knowledge and more accurate diagnosis, cases will be better selected. The operation is new, and we have not yet defined its legitimate field. With the growth of specialists, for which I earnestly plead, we will be able to treat uterine appendages before they become damaged beyond repair, and also they will be brought to us for removal, before such alterations in contiguous parts, and in the organs themselves develop, as greatly to complicate any operation for their removal, and hence retard recovery.

That our methods of operating are not perfect goes without saying, but I think the principal questions concerning our technique relate to the separations of adhesions, and the treatment of the pedicle.

Since I have learned to use iodine in the abdominal cavity without fear, I do not hesitate because of hæmorrhage to separate the most dense adhesions. I much prefer iodine to the per-sulphate of iron, so highly regarded by Mr. Tait, and have never yet failed to control profuse oozing from torn adhesions by its use; nor have I found unpleasant conditions to follow, even when the abdomen has been thoroughly swabbed out with it. In one case where the hæmorrhage was alarming, coming from an extensive surface, and I was obliged to almost flood the abdomen with iodine, I thought that iodism developed, but this was only temporary and left no after effect.

Other things being equal, the more adhesions that are torn, and the less they are tied, the freer from suffering will convalescence be. In the removal of damaged adnexa, it is rarely necessary to use ligatures for adhesions, but I believe better results will follow pressing the adherent surfaces apart, than when they are torn with violence. Indeed

violence should never be employed in the abdominal cavity, for while the operator may seem to be using almost unjustifiable force in separating adhesions, this force is expended in the wrist and outside of the abdomen.

Our present method of treating the pedicle by tying has the merit of safety; otherwise it has little to recommend it, for it not only introduces a foreign body that must be disposed of, but it constricts more or less sensitive tissue. In this fact we find a chief cause of continued suffering after removal of the uterine appendages. As long as the ligature is in force, so long will pain be felt.

Of all knots, the Staffordshire is the most trustworthy, but this very circumstance renders it especially effective in prolonging suffering. It constricts unnecessary tissue, as all ligatures do. The ideal method of tying the broad ligament and ovarian pedicle is by the separate ligation of arteries with catgut. The method would be tedious, but is practical; and if I could procure a trustworthy catgut I would try it. At present I know of nothing in the market that I am willing to trust for that purpose.

The period of convalescence after removal of damaged uterine appendages is frequently unduly hastened. Our patients, after the first twenty-four hours are, as a rule, very comfortable, and we are apt to forget, in the relief they experience, the true character of the operation, and the bearing it has upon the whole economy. No matter how slight the operation has been, a definite process of repair must be passed through—a physiological process, which consumes a certain period of time. Rest is an important element in the repair of any tissue. Then, if both appendages are removed, the system must pass through an enforced change, both physical and mental; and many of the cases reported as failures, have, I believe, been prematurely judged, for they have not yet passed their climacteric. Before operating for the removal of the appendages, I always prepare my patient for what they may expect if the change of life is

thus brought on, and I find them much more willing to wait for a cure, and less disappointed because of delay in obtaining prompt relief, than if kept in ignorance of the very probable extended convalescence.

I now oblige all my patients, without exception, who have had a laparotomy, to remain in bed at least three weeks. During those twenty-one days they are not allowed to sit up in bed. In many instances this seems unnecessarily severe, for after the first five or six days they are usually very well, sleeping well, and with good appetite and good digestion. But since adopting this rule my recoveries are more rapid, and altogether more satisfactory.

42 WEST FORTY-EIGHTH STREET.

DISORDERS OF THE CERVIX UTERI. A CAUSE OF STERILITY.*

BY

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Since the appearance of my work, "Sterility," the rôle of the cervix uteri in the causation of sterility has been largely discussed, and many of the opinions and theories once held have been modified or thrown aside.

I propose in this paper to briefly mention the supposed causes of sterility originating in the cervix, and state the present beliefs concerning their importance.

1. *Flexions of the cervix* were at one time considered potent factors in causing sterility. My experience has convinced me that altogether too much blame was placed on this condition. I have known many women with cervical flexions

* Read before the Homœopathic Medical Society of the State of Michigan, at Grand Rapids, May 19, 1891.

who readily conceived. In fact, retroflexion is such a common condition in child-bearing women that I cannot imagine how that condition ever attained any prominence among the causes of sterility.

Lateral flexions are so rare that we will pass them by. Antelexion certainly causes sterility in many cases; but whether it is due to the narrowing of the cervical canal is not always easy to determine. The *bent* condition of the cervix of itself cannot prevent the passage of spermatozoa, provided the secretion of the canal is healthy. The spermatozoa measures only $\frac{1}{800}$ of an inch in diameter, and moves readily in normal cervical mucus. Now a cervical canal may be contracted below its normal size— $\frac{1}{16}$ of an inch—and still be pervious to enough healthy mucus to allow free and unobstructed movements of the spermatozoa.

But if the cervical mucus is in the least thickened, or if the mucus of the interior lining of the uterus is unhealthy, it may so obstruct a narrow canal as to be a cause of sterility. This condition is often cured by dilating the cervix. But the cure is not so much caused by the enlarging of the canal as in allowing a free exit of the unhealthy uterine cervical discharges. There are only two medicines which appear to me to have any power to remove flexions of the cervix. They are sepia and the preparations of gold.

2. *Cervical leucorrhœa* is one of the commonest causes of sterility. In its natural state the cervical mucus does not *flow* from the cervical canal. It forms a transparent, slightly tenacious plug, which remains all through the month to be expelled at the menstrual period. Shortly after the menses cease to flow this plug again forms and grows more tenacious until a few days before the next period, when it becomes thinner. This accounts for the greater susceptibility to conception a few days before or after the menses. Even this tenacious plug does not seem to be such an obstacle to the progress of healthy spermatozoa as one would suppose.

It is when the cervical mucus becomes opaque, *soapy*, purulent, acrid, or bloody that sterility occurs, for then the secretion becomes poisonous to the spermatozoa, or so thick that they cannot penetrate through it to the uterine cavity.

Whenever I discover the "*soapy*" discharge from the cervical canal, I am sure that I have found the cause of the sterility. Tyler Smith says this kind of discharge is very alkaline, and full of oil and pus.

I judge it must be very poisonous to the spermatozoa, for when the living animalcules are mixed with it, the microscope shows that they soon lose their vitality.

You have all had cases where the leucorrhœa is thin, watery, and very irritating to the mucous surfaces and even the skin over which it passes. This generally comes from the endometrium of the uterine cavity, but sometimes from the cervical canal.

Such patients are always sterile. If aurum, sepia, sabina, or phosphorus does not remove these diseased discharges, you will have to resort to local application of iodine, carbolic acid, kali bichromium, creoline, or pinus canadensis to change the condition of the cervical follicles. The slippery-elm tent, by exerting non-irritating pressure, often effects a cure.

3. *Ulceration or erosion* of the cervix may prove a cause of sterility by causing such an unhealthy condition of the cervical and vaginal secretions as to destroy the spermatozoa before they can enter the canal.

But I have known bad erosions and ulceration to be no bar to conception. Nor is cancer of the cervix an absolute bar.

4. *Lacerations of the cervix* may be an indirect cause of sterility because they are often attended by one of the discharges of the cervical canal mentioned above. If they do not, they rather favor conception by enlarging the os uteri.

5. *A too small os* (pin-hole os) is nearly always a cause of sterility, at least such has been my observation.

A very small os retains the normal secretion of the canal until it becomes abnormal. It is nearly always accompanied by a *conical* cervix. Now, with a conical cervix and a pin-hole os, we have two conditions which offer a mechanical obstacle to the entrance of the spermatozoa into the uterus.

I have often cured sterility by enlarging the os, by incising it on each side, touching the cuts with carbolic acid to prevent closure.

But even after such incisions the os has a tendency for a time to close up.

I have known a pin-hole os to recur several times after incision and dilatation. This can only be prevented by the use of a cervical stem of wire.

In conclusion, let it be remembered that sterility is generally the result of an unhealthy state of the cervical or vaginal secretions.

Get the cervical mucus healthy in every respect, and conception will occur, because then it is not inimical to the life and movements of the spermatozoa.

NOTES ON A YEAR'S WORK IN OBSTETRICS.*

BY

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I am struck with one peculiarity in the practice of midwifery in San Antonio. Whether this is general through the South I do not know, but am inclined to believe so. I refer to the comparatively small number of women who call in the services of a physician at that interesting and oftentimes critical period in their history. They depend

* Read before the Texas Homœopathic Medical Association, May 12 and 13, 1891.

largely upon midwives and old negro aunties; this is true of women among even the wealthier classes. In consequence of this practice the obstetrical list of a general family physician is apt to be quite small as compared with that of a similar practice in the North.

It is a fact, also, that in spite of much unskilled and careless service by these attendants, puerperal fevers are extremely rare. No doubt the generally dry and aseptic atmospheric conditions, together with the climatic necessity for admitting plenty of air and thus good ventilation to the sick chamber, are at least partly responsible for this favorable record.

While, therefore, unable to boast of the stereotyped record of "one hundred cases," I trust I shall find material of interest in my little list of twenty obstetrical cases with twenty living children, during the past year. Of these six were primiparæ, the rest multiparæ. The youngest was fifteen years old, and strange to say was the only one among the primiparæ who suffered not the slightest laceration. There was no laceration among the multiparæ. I have watched this matter of perineal rupture pretty closely, and I am quite skeptical of those who claim an immunity from this accident. It is my opinion that comparatively few primiparæ pass through a delivery without a laceration. In the term "laceration" I would include the slightest solution of continuity, even a tear of the fourchette. I can say, however, that by following the method I consider the best and most natural for saving the perineum, I have rarely seen any rupture in multiparæ and only very slight ones in primiparæ. Yet I do not doubt that in some cases the most skillful efforts cannot prevent complete rupture. It is my habit to examine most carefully for the slightest tear and, if found, to close by sutures at once. None of the tears in the above five cases extended more than half an inch into the perineal body. I close them at once for two reasons: first, to make any possible septic infection less

possible, and second, to prevent what might become a loss of support in certain cases. I once allowed one of these slight ruptures to go as too insignificant for attention; but as soon as the woman got on her feet there was sufficient loss of support to cause prolapsus and much misery. I then and there repaired the breach and determined never to neglect it again. We ought to leave our patients as nearly normal as possible.

I do not believe much in any external supporting of the perineum. I believe the best method to prevent a rupture is to regulate delivery so as to permit slow and gradual dilatation of the perineal body by the presenting part. The assistance of the patient is imperative. At this stage, when the pains come thick and fast, there is the greatest inclination to bear down and drive through in a hurry. That is just what she must not do, but, at the physician's command, remit all voluntary straining and hold back. I have never yet had a patient fail me; it is only necessary to explain the why and wherefore beforehand to gain her intelligent assistance and obedience in the time of trial. Much better than pressure upon the perineal body is gentle pressure upon the presenting part, thus moderating as much as may be the force exerted upon the perineum. Half an hour devoted to this work may save much misery thereafter. Of course a few driving pains, and "all is over," with the busy doctor again on the wing, is much nicer for the doctor, but may be much worse for the patient.

The operation required to sew up a laceration is commonly spoken of as a trifling thing, and as readily to be performed without an anæsthetic. Now I must dissent from this statement. True, there is a superficial numbness of the bruised tissues, but the normal tissues through which the needle passes are, if anything, hypersensitive; and in my experience, the operation without an anæsthetic is an unnecessary cruelty—the more so when the patient is already worn out by previous suffering. Of course one meets here

and there a dull and insensitive woman who can stand it, and who can be excepted from the general rule. In a perfectly normal case of midwifery I do not order the douche, unless the patient wishes it as a matter of personal comfort. But when there is the slightest wound, either in cervix or vagina, I order the bichloride douche, 1-4000, to be rigidly used, morning and evening, with bichloride pads or compresses to the vulva. It is some bother, I know; but I can never forget that in such cases it is doubly true that "an ounce of prevention is worth a pound of cure."

Of the list, all were vertex presentations except one, which was a breech. It was the second child. The mother told me she knew the child was "head up," but thought it would turn just before confinement, as she had had such an experience with her first child. However, No. 2 failed to turn as expected, and so we had a breech. It was a large child, but labor progressed rapidly and successfully; the head was somewhat slow in disengaging, and caused us a little anxiety; after delivery some effort was necessary to induce respiration. As an interesting item I would say that in one of these babies the cord was wound five times about the neck.

The forceps were used twice—once in a primipara and once in a multipara. In both cases they were applied at the inferior strait. The indications for forceps were delayed; second stage due to disproportion between the head and pelvic outlet. The case of the multipara was interesting from the fact that in both previous confinements the use of the forceps was delayed too long; in the first instance so long that the child was still-born; and in the second case the child lived only two months, and died of marasmus.

Having been informed of this history I was prepared; having given a fair chance to nature and seeing that no progress was being made, I applied the forceps and delivered the child. As a result the mother made a quick and fine re-

covery and the plump and beautiful boy, now a year old, is the joy and light of his mother's heart.

One word about hæmorrhages. I have had some frights that make me careful about post-partum hæmorrhages. The internal form is more treacherous than the external. It is my habit to stay by my patients at least an hour after the placenta is expelled and to look frequently to the uterus. I make it a routine practice to administer a teaspoonful of ergot immediately on the completion of the third stage. I do this on the same principle that would lead me to bind a hæmostatic compress on an external wound, or apply my hæmostatic forceps to a bleeding artery. I have seen several cases of internal hæmorrhage with dilatation of the womb leading to frequent syncope without a drop of external bleeding. Nothing but careful watching of the uterus will prevent such cases. Recently I was called hastily by a midwife with the word that there was a "tumor" in her patient's womb and she didn't know what to make of it. On arriving I speedily found that the uterus was frightfully distended and had become dislocated clear up into the right lumbar region, and the woman in collapse. Vigorous kneading externally with free use of the fingers internally soon emptied the uterus and it slipped back into its proper position.

In the recent words of Dr. T. Gaillard Thomas, "Did you ever think of the really critical nature of that great period in a woman's life?" In spite of the most careful and skillful attention accidents will happen and injuries will result beyond all human control.

How culpable, then, for us to permit preventable accidents and calamities to befall the fated mother through sheer carelessness or ignorance! May our skirts be clear of such blood!

MODERN METHODS OF PRECISION IN PELVIC
DIAGNOSIS.*

BY

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The function of the specialist is essential, no less in a community of letters than in one of labor. Since the age of Socrates the broad dogma of specialism has been accepted all through time ; and the sphere of individual work narrowed, that its character might have more of precision. The specialist must justify his existence by contributing results obtainable only by concentration ; though his intellectual range is limited, he gains in mental intensity what he loses in mental proportion ; his office is contributory to the general sum of human knowledge.

Now the principle of devolution is nowhere more necessary than in the study of the phenomena of morbid states of the human body. These manifestations are so Protean, and withal always within the sphere of antecedent and consequent, that their study is as promising as its subdivision is necessary. The more philosophical our conception of abnormal conditions, and the wider our purview of the sphere of cause and consequence, the more successful shall we be, because the more resourceful, in our use of natural forces for the renewal of health. And within the area of inquiry, no fact but has its function, no knowledge but is germane to the end in view, the restoration to the normal.

The organs involved in the perpetuation of the species are in such a condition of unstable equilibrium, and so liable

* A Post-graduate Lecture delivered at the London Homœopathic Hospital on February 6, 1891.

to the assaults of traumatism, that special study is requisite for the desirable attainment of special skill in their treatment in disease. But in order to gain a clear conception of the abnormal, we must have a vivid and abiding image of the normal as a foil. So I will sketch the chief details in the background of the normal condition, that the outlines of the unnatural and diseased may stand out in bold relief.

On making a vaginal examination, search carefully for the right and left ischial spines. Through the spines the pelvic equator may be drawn. The cervix uteri is located on this line, exactly midway between its extremities. Thus, if the cervix be below the equatorial plane, there may be present prolapse, cervical hypertrophy, or downward displacement due to tumor pressure. If the cervix be nearer one or other ischial spine, we have uterine displacement, due usually to contracting parametritis, or broad ligament cyst; if above the equatorial plane, the displacement may be due to tumor adhesion, dragging up the uterus in the direction of growth; and so on.

What is the normal position of the corpus uteri? Most book diagrams are hopelessly wrong about this. Projections have largely been made from examinations after death, or from a sense of artistic fitness, and only of late years have the painstaking and thorough investigations of Schultze shown that the normal position of the uterus is at right angles to the vaginal long axis. The anterior uterine wall lies exactly apposed to the posterior bladder wall, the latter viscus being distended more or less; the fundus uteri is found immediately behind the symphysis. The long axis of the uterus follows a line drawn from the upper border of the symphysis to the coccygeal tip, the line being a little curved. And the vaginal end of the cervix is about 2 or 3 cm. distant from the coccyx.

This, then, enables us to form a clear conception of the normal relative locus of the cervix and the corpus uteri.

METHODS OF DIAGNOSIS.

For the exact investigation of the lesions of the pelvic viscera we amplify our diagnostic methods into the synthetic, the graphic, the tactile, the instrumental; and when the diagnosis has thus become limited to a few alternatives, we add thereto the special. These consecutive procedures will now be treated in detail.

I.—The Synthetic Method.—Hegar directs that we should always commence diagnosis by cross-examination, and in this procedure we have various necessities to consider. The necessity for diagnosis; the necessity for prognosis; the necessity for constructing a variable that shall resemble in its essentials a constant—the variable being the patient's condition, and the constant the drug proving. Beside these requisites there are larger issues upon which information is required. The effects of heredity; the mutual exclusion of types of disease; the secondary effects of local lesions distributed over other organs and tissues in the body. All these lines of inquiry, whose results bear notably on the condition of our patient before us, can only be made fruitful by careful observation and comparison. To this end we adopt a schema broad enough to include all essentials, and detailed enough to comprise all the elements of the case. Here, as elsewhere, we are utterly unscientific where we are not methodic. Subjoined is a copy of the printed form, with space for insertion of detail, that is in use at the London Homœopathic Hospital.

Name.....*Age*.....*State*.....
Children.....*Miscarriages*.....*Last Confinement*.....
Last Cata.....

Menstruation: Last Cata.: Duration, Quantity, Nature; Comparison; Interval; Concomitants. First Cata.: ut supra; Regular or no; and since.

Pain: During Period; Interval, or both; Duration; Ex-

act Days; Maximum; Nature, Locality, and Radiations; Aggravation and Amelioration.

Bladder: Urging—Day or Night, or both; Dysuria.

Primæ Viæ:

Other Notable Conditions:

GENERAL CONDITIONS.

1. *Temperament; Diathesis; Condition.*
2. *Previous History*: Exanthems—vaccination.
3. *General Aggravation and Amelioration of Symptoms.*
4. *Eyes.*
5. *Head.*
6. *Heart and Circulation.*
7. *Urine.*
8. *General Symptoms*: Heats and Flushes; Extremities; Fainting Fits; Petit Mal; Body Pains, etc.

The immense importance of accurately transcribing all details of a case consists in this: that without such carefully written descriptions no general deductions can be made. Thus in a recent trial at the Law Courts, large damages practically hinged on a correct answer to the question "Does free bleeding occur as the earliest hæmorrhagic condition in carcinoma uteri?" The response of the specialist was made as the outcome of some years' careful and detailed registration of history and symptoms in gynæcological cases.

II.—The Tactile Method.—Modern gynæcology dates from ten years back, and corresponds with the perfection of the bi-manual method. On this point Lawson Tait is most emphatic: "The old-fashioned mechanical school, the teaching of the speculum, the sound, the caustic stick, and the pessary has been practically killed." Schultze, the most finished of German diagnosticians, writes: "The sound is seldom used by us now to find out the position and shape of the uterus, because a much better knowledge is obtained on these points by bi-manual palpation." For accuracy and

ease in diagnosis, the bi-manual method far surpasses all others, taken singly or collectively.

For the effective and profitable conduction of the bi-manual, the appointments and preparations are :

(a) The table or couch : of sufficient height to obviate stooping on the part of the examiner ; of sufficient hardness to allow free local examination with ease ; it must be approachable on both sides ; it should have also two foot-rests at the end.

(b) Complete unloosening of all garments down to the skin ; the removal of corsets.

(c) Empty rectum and bladder.

Place the patient in the dorsal position, and commence by *Examination of the abdomen*. Then, with the knees well drawn up, still in the dorsal decubitus, proceed to

Vaginal examination with the forefinger ; with the other hand over the symphysis, the fundus can be crowded down into the pelvis ; and the relations and position of all the pelvic viscera determined. Next, place the patient in the *Left lateral position* : The parametria and Douglas's pouch can be still better explored.

Rectal examination should always follow, as many points can be better and more clearly determined after vaginal examination. Inspection may, if necessary, be conducted for perineal tears, labial abscess, urethral caruncle, etc.

These procedures complete an ordinary bi-manual examination. In no instance is it *necessary* to introduce the sound ; in few cases will the speculum give more information than is obtainable by the *tactus eruditus*.

The following schema we adopt to register the result of the tactile method of examination, supplemented by instrumental aid when necessary.

PHYSICAL EXAMINATION.

Abdomen : Contour ; Parietal thickness ; Skin ; Tension ; Sensitivity ; Abnormal conditions ; Auscultation ;

Percussion; Palpation, deep and superficial; Measurements, A, B, C, D, E, F, G.

Pudenda and Perineum: Lab., maj., min.; Meatus; Cystocele; Rectocele; Perineal Body; Neoplasm; Procidencia; Ducts.

Vagina with Portio V.: Introitus; Calibre; Sensitivity; Neoplasm. *Portio V.*: Position; Direction; Mobility; Size; Laceration; Hypertrophy; Atrophy; Sclerosis; Ectropion; Neoplasm; Softening,

Cul-de-sacs: R.; L.; A.; P.; Dimensions; Contents; Resistance; Sensitiveness.

Bi-manual Examination: Uterus: Size; Position; Contour; Consistence; Deviation; Ant. Segt.; Post Segt.; Mobility or Fixation; Fundus; Corpus. *Parametria* R. and L.; Free; Rigid; Contents; Contracted; Resistance; *Douglas P.*: Contents; Resistance; Tubes; Ovaries.

Speculum: Volsella: Dilatation and Exploration; Curetting; Microscope.

Vesical Exploration; *Bony Pelvis, Coccyx, etc.*;

Rectal Exploration; *Diagnosis*;

Mammæ; *Treatment.*

III.—The Graphic Method.—The results of local examination should always be sketched as well as described. For vividness as well as accuracy, for a sound general conception and correct proportion of detail, this method is pre-eminently a method of precision. Indications of site, of intimate relation, of size, of form and outline, of direction of growth—all these can be represented much more quickly and much more accurately by drawing than by description. Outline diagrams are all we need concern ourselves with, and we will consider how best to utilize them. For pelvic purposes three planes of section are enough—the plane of the pelvic brim, the median antero-posterior pelvic plane, and the transverse plane. These three planes for drawing correspond respectively to conditions as found in the upright position, the usual left lateral position, and the position

as lying on the back. To these may be added an outline abdominal sketch for delineation of tumors, etc.

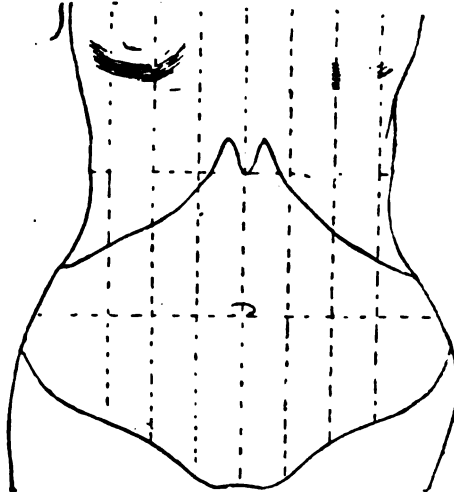


Fig. 1.—Outline diagram for sketching Site of Abdominal Tumors, etc.

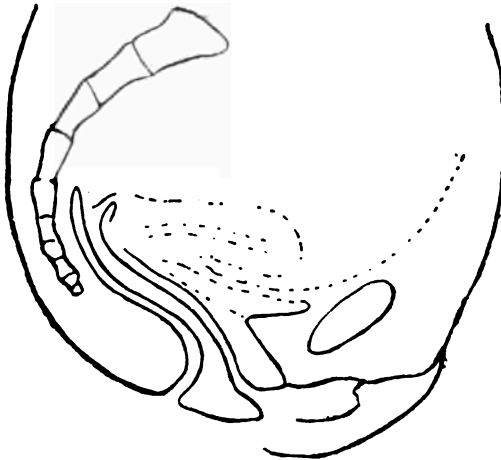


Fig. 2.—Patient lying in Left Lateral Position.

These diagrams are prepared by Schultze, and are those in use at the Vienna and other great German schools for the

same purpose. These four outline diagrams give the condition of things from all aspects of examination, and together

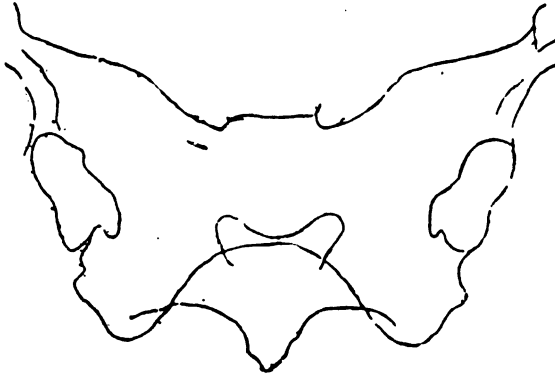


Fig. 3.—Diagram corresponding to Dorsal Decubitus. Pelvic Viscera to be sketched in.

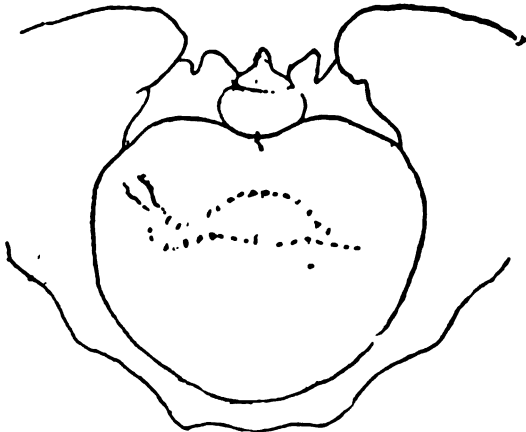


Fig. 4.—Diagram corresponding to Plane of Pelvic Brim.

they tend to that accuracy in diagnosis which is the aim of every practicing gynæcologist.

IV.—The Instrumental Method.—It is sometimes requisite to supplement the tactile method by the use of instruments designed to verify or amplify the information already given

by the bi-manual. The sense of sight is thus requisitioned by the use of the

Speculum.—This instrument has conducted to much bad pathology and much ineffective treatment. In vaginal lesions, *e.g.*, vaginitis granulosa, it is very useful; in abnormal cervical conditions, *e.g.*, a presenting polypus, epitheliomatous fungosities, etc., it also has its vogue; but in all uterine lesions it is utterly useless, and very often misleading. In cervical conditions, too, let it be remembered that lacerations in the cervix were for many years unnoticed and almost unknown, consequent upon the use of Ferguson's speculum, which does not exhibit them *ad naturam*.

When it is desirable to use a speculum, Ferguson's is undoubtedly the best, or the smaller Holland's modification. The Sims duckbill, or better, Heywood Smith's modification, is most useful; with this should always go Simon's spoon for keeping up the anterior vaginal wall.

Uterine Dilators.—These are of the highest service for allowing more intimate exploration of the cavum uteri when required. Never use such weapons as the metal-pronged dilators; they are dangerous and unscientific. By far the best and safest are Hegar's dilators of glass or ebonite. After use it is well to lay in the uterine mouth an iodoform pencil; if this be done, unpleasant after results may with certainty be avoided. The posterior—or anterior—cervical lip must be steadied by a double hook, but never attempt with this to draw the uterus down if any lateral pelvic deposit exist.

The curette may then be used to detach shreds of membrane, fungous granulations, sloughing uterine tissue, etc., or more guardedly for obtaining small quantities of neoplasm for microscopic examination.

The intra-uterine speculum is an instrument at present wholly undeveloped, but from which ere long surprisingly accurate information may be obtained. I shall recur to this subject at some future date.

The Sound.—Only in the rarest cases is the use of this instrument necessary. All the information it gives can be secured with more certainty and less risk by a careful bimanual examination.

V.—Special Methods.—When diagnosis has been narrowed to a few alternatives, certain special combinations of simple methods are necessary for the final determination of the physical condition. In the examples of some of the more frequently recurring abnormal conditions, which are appended, such procedure is evidenced.

EARLY PREGNANCY.

The history of one or two periods missed is always suggestive; but this requires to be supplemented by Hegar's sign, which in early pregnancy, even of one and a half months, is never wanting. "The uterus in early gestation loses its pear-shaped outline, and becomes bellied out in its lower segment in all the transverse diameters; this is most readily felt in the anterior cul-de-sac."

This is an unfailing sign of early pregnancy. I have demonstrated it again and again to pupils and assistants in my out-patient clinic, and in every case with success. Quite recently a patient was sent to me in whom I diagnosed early pregnancy of about two months. She went home, communicated with her local medical attendant, who flatly denied the diagnosis. A miscarriage in the fourth month settled events even to this gentleman's satisfaction.

II.—Uterine Fibroids.—Almost every pelvic mass is diagnosed by the unskilled as a uterine fibroid. I have seen pelvic exudation, pregnancy, malignant disease of the pelvic organs, ovarian cyst, pelvic abscess, all in their turn asserted to be uterine fibroids! That uterine fibroids are common is beyond doubt; but that other pelvic lesions with solid elements are also common is not sufficiently frequently remembered.

The synthetic method is essential here in recording men-

orrhagia or amenorrhœa, pain or merely neurotic explosions, a history of previous pyrexia, or an a-febrile course, a cachexia, a traumatism, or a purulent gush. The tactile method will show an absence of adhesions, an enlarged, often nodulated, uterus, a freedom from peritoneal irritation or effusion, and a normal cervix. The graphic method will represent the exact size, position, and relations of the uterus for comparison in estimating progress. Abdominal measurements for purposes of precision are worse than useless, if used alone, to determine size.

III.—Uterine Carcinoma.—No form of uterine lesion is heralded or accompanied by so great a diversity of symptoms as uterine carcinoma. Bleeding may be present or absent; pain may be considerable or *nil*; rectal and vesical symptoms may be marked or wanting; and cachexia may be obvious or of very late development. Yet the synthetic method is here of great value, if only to record the varying times at which the classical symptoms may make their appearance in the history of the lesion. The tactile method is much more serviceable, but this requires to be used with great care, for a sclerosed cervix may be called a schirrhus, or an epithelioma diagnosed as a benign papilloma. In advanced cases there is no room for doubt; in early developments the removal of a small piece of tissue by the curette, for microscopical examination, will generally decide the question.

IV.—Prolapsus Uteri.—In minor degrees of prolapsus the exact amount or even the presence of prolapse requires careful consideration. The synthesis will reveal some urging to micturition, aggravated during the day, but relieved on adoption of the horizontal posture. The tactile method will always show, if the patient strain, a commencing descent in the anterior cul-de-sac, continuing until the cervix, and finally the posterior cul-de-sac (in advanced cases) are thrust in the direction of least resistance, toward the vaginal in-

troitus. The bulging of the anterior cul-de-sac on straining is, in however slight degrees of prolapsus, never absent.

These conditions are cited to show the necessity of adopting the various methods of diagnosis in each appropriate case, and the impossibility of accurately determining the condition if all sources of information be not drawn upon. To become a master in the art of diagnosis requires incessant practice, but care and discrimination can be evidenced by all. Not only elaborated method, but *nous* is required to give success in diagnosis, and unclassified experience is often of no avail.

DECUBITUS IN DYSTOCIA.

BY

CHARLES A. CHURCH, M. D.

PASSAIC, N. J.

A knowledge of little things, as well as great, is science; the ability to call up and utilize that knowledge in emergencies, is skill; the possession of both knowledge and skill marks the dexterous, the expert.

My subject is one of the little things of the obstetric art, a knowledge of which, and the ability to utilize that knowledge to the help of cases of parturition when it is applicable and needed, will do more for the comfort and safety of parturient women than any other one thing known, the forceps and chloroform not excepted.

I presume cases have occurred in the practice of all the older physicians present of lingering, tedious labor, which has terminated almost as if by magic, when the patient has simply changed her position, sometimes from back to side, from side to back, or from one side to the other.

Cases of this kind occurred in my early practice, but without making any other impression upon my mind than that

it was queer, a funny coincidence, until a case occurred that was a sort of eye-opener to me. I was engaged to attend a lady in her third confinement. Her previous labors had been without accident or incident outside the ordinary. Her physical condition was in every respect normal. The functions of the kidneys, stomach, liver, bowels, everything was as it should be. She had no headaches, no puffiness of the ankles or feet, was eating properly, taking plenty of exercise in the open air, looked well, and seemed contented and happy. In due time regular pains came on and I was notified. My first examination showed the os uteri partially dilated, soft and easily dilatable, the membranes slightly protruding, and the uterus contracting firmly with each pain; everything indicated a reasonably rapid, natural, easy delivery. I sat down to wait. After a reasonable time I made a second examination but there was no perceptible change or progress; after rapidly reviewing the points in the case for my own satisfaction and noting that the bag of water protruded with a proper tension during each pain, I again sat down to wait. A third examination some time later still showed no progress except a little more dilation of the os and a little more protrusion of the membranes. Pressing my examination inside the os, I found one of the sutures of the child's head, which I supposed was the sagittal (although I could not reach either fontanelle without danger of rupturing the membranes), from before backward and from left to right.

Diagnosing the position left occipito-anterior, I assured the patient and friends that it was all right only a little tedious, and went to lie down for a while, to be called when needed.

After a while I was called, and needed, too, not because of any progress toward delivery, but because the patience of all hands had become exhausted, and there was a demand that something should be done. Chloroform, instruments, consultation, any number of neighbors' prescriptions, "what this

doctor or that, older than myself, had done in similar cases," etc., etc. I was a young practitioner, a complete stranger in the place, and I can assure you, if any doubt it, I felt the responsibility of that hour. Pressing my next examination with a little less regard for consequences, I discovered that the suture of the child's head, which I had supposed was that between the two parietal bones, had on one side a firm unyielding bone; following up this clew, I found I had the lambdoidal suture instead of the sagittal, and that the suture between the parietal bones was partially astraddle the pelvis, and that every pain, instead of pressing the child's head into the pelvic canal, was pressing it down upon the brim of the pelvis and its neck back against the promontory of the sacrum. I worked faithfully, if not skillfully, to dislodge that head, but unsuccessfully. I could not seem to make any impression upon it. As an experiment I placed the mother upon her left side and pressed the body of the uterus as far as possible toward her left down upon the bed; this movement dislodged the head, brought the posterior fontanelle into the axis of the pelvic canal, and within less than two hours the patient was safely delivered of a fine, plump, well-formed child, and so far as I know never suspected her physician's mental agitation, nor that hours of the suffering she had endured were due to his ignorance. But her sufferings were not altogether in vain, for the experiences of that night taught me a lesson of the advantages to be derived from changing the position of the mother to correct a faulty position of the child, or a faulty relation of the child's head to the pelvic canal, which has served to shorten many a tedious labor and to render safe and comparatively easy many a difficult and complicated one.

The principle involved and its application to the mechanism of labor may be described as follows: An infant's head is somewhat egg-shaped, a point very near the posterior fontanelle, possibly a little below on the occipital bone, representing the small end, from this point to the chin is

the longest diameter the occipito mental. If this diameter is in proper relation to the pelvic canal, with the occipital end ahead, there is usually very little for the accoucheur to do except to support, encourage, protect, and be ready for emergencies. If, however, any other point than the occipital end of the occipito-mental diameter presents at the brim of the pelvis, or seems about to enter the pelvic canal, I believe it to be the duty of the accoucheur to place the mother in such position as will bring about the position and relation I have indicated as the correct one if possible.

To do this requires necessarily, first of all, a correct diagnosis, not always, by any means, an easy thing to make in the early stages of labor; but by changing the mother from side to side and from face to back, and making careful examinations in these several positions, the location and direction of the child's head can usually be made out, and also the position of the mother necessary to bring about a correct relation between child and mother for the easiest delivery. A test of the success of our maneuvers is found by an examination of the child's head post-partum. If the caput succedaneum is situated squarely over the occipital protruberance and posterior fontanelle, you may be satisfied that so far as position is concerned, your patient has had as easy a labor as possible; but if situated anywhere else, either higher up or at one or the other side, no matter how easy the labor has been, it would have been easier in a more correct decubitus.

Two or three cases, briefly cited, will illustrate the practical application of this principle.

I was called in consultation to a case with the following history: On the previous day, as the patient was walking upstairs to her room, there was a sudden gush of water from her, which continued to flow until she reached her bed. The physician was immediately summoned, and found the membranes ruptured and labor begun. For nearly twenty-four hours he had worked over the case without producing

the least effect; even the forceps which he had applied could not make the head engage in the superior strait. Examining the patient I found the neck of the womb sufficiently dilated to admit the forceps, and soft and dilatable, but the child's head in the transverse position, the occiput to the mother's right. I placed the patient upon her right side, crowded the body of the uterus over to the right side of the abdomen as far as possible, advised remedies to quiet her, and a few minutes sleep if possible, as she was not only greatly exhausted, but greatly agitated and alarmed. Within an hour the child was born, the physician who had left the bedside for a few minutes returning just in time to receive the head as it protruded from the vulva.

A fatal case occurred in my native village during my student days which made a deep impression on my mind. The physician who was called in consultation, and who delivered with instruments, told me that it was almost impossible to deliver the child because the instruments slipped. A similar case has occurred in my own practice and I found the slipping of the forceps due to the fact that the fenestra of the blade caught over the chin of the child and every time traction was made tipped up the head and brought the occipito mental diameter directly across the pelvis above the superior strait; of course delivery in that position was impossible, but by placing my patient upon her side in such a position as to bring the occipito-mental diameter into the axis of the pelvic canal, my patient was soon delivered without other help than the uterine contractions.

I was called to attend a patient for a brother practitioner who was temporarily out of town. I found the patient had been walking the floor for ten hours at the instance of nurse and friends, who insisted that it would help her along. I found the os uteri soft and dilatable, the pains strong and frequent but no progress; continuing the examination during a pain, I found that the child's head instead of being forced into the pelvic canal, was being pressed back against

the promontory of the sacrum. I placed her upon her back, pressed the body of the uterus upward and gave instructions that with every pain she was to press the abdomen tumor upward and backward. The child was born in considerably less than an hour.

Sometimes, as has already been indicated, it is necessary to deliver patients upon the right side, sometimes upon the left, sometimes upon the back, and I have delivered women lying flat upon their abdomen. The one object to be attained is to bring the occipito-mental diameter of the child's head into the axis of the pelvic canal with the occipital end in advance. To do this will often test the mechanical ingenuity of the accoucheur to the utmost, but if you gentlemen succeed in getting as much benefit to your patients from its use, and as much relief to your own patience in your obstetrical practice, as I have, it will repay the effort necessary to make yourself familiar with the detail of its application. It is not a panacea for complicated labor, but the application of a simple principle of mechanics to the relief of suffering womanhood in her most trying hour, and applicable in some of its modifications to almost every case.

ON TREATMENT OF SALPINGO-OVARITIS BY LAPAROTOMY.*

BY

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Terrillon made fifty laparotomies from 1887 to 1889, and lost only two patients, one from purulent salpingitis breaking into the peritoneum during the operation and the other

* Notes from translation from the *Séminaire Médicale*, 22, 1889.

from tuberculosis. All the others, of which several were of serious nature, were cured. In dividing the cases, twenty-four were operated on account of catarrhal or simple inflammatory salpingitis with thickening of the walls, hypertrophy of the fingers of the mucosa, ovaries more or less changed and adherent to the peritoneum; five times hæmorrhagic salpingitis; seventeen cases were purulent or muco-purulent; four times tubercular salpingitis.

After the laparotomy the tubes of both sides were removed in 32 cases, one only in 12 cases, the other could not be operated; 34 of the 50 can be considered cured, complain of nothing, follow their usual mode of life, and feel grateful for their great relief. Ten are only partially improved; notwithstanding that they feel stronger and gained in weight, they are still not free from pains. In two patients, after total ablation of the tubes, signs of hematocele set in at the former time of menstruation. Of the improved cases three certainly suffer from tuberculous salpingitis, and only the worst tube, showing a purulent cyst, was removed. Though they do not suffer on the side operated upon, the other one is painful. In three cases the operation failed entirely to give any relief.

Resuming the cases: catarrhal or simple inflammatory salpingitis with thickening of the walls of the tubes, whether arising from blennorrhagia or after a miscarriage, gives the best results. Even old neglected cases sometimes do well after the ablation of the adnexa of one side. Hæmorrhagic salpingitis has often troublesome symptoms after the operation, either from their size, which aggravate the operation, or from their age. Muco-purulent or purulent salpingitis is the most dangerous; still, careful drainage cured five cases, while two died, as during the operation the pus broke into the peritoneum. Tuberculous salpingitis is ominous on account of the difficulty during the operation to remove all the affected parts, and even when successful, relapses are sure to follow.

● EDITOR'S TABLE. ●

—Quite a number of prominent men have been taken from our special fields of labor during the past quarter.

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—Carl Braun died at Vienna on the 28th day of March last, after a long and successful career as a gynæcologist and obstetrician. His contributions to these two specialties have been many and valuable.

* * *

—Dr. Fordyce Barker died at his home in New York on May 30. Though in his seventy-third year, and afflicted by ill-health for some time lately, he continued his professional labors to the time of the apoplectic seizure to which he succumbed. Dr. Barker was one of the founders and the first president of the American Gynæcological Society.

* * *

—Dr. Alfred I. Sawyer died at his home at Monroe, Mich., in the sixty-third year of his age. He was elected president of the American Institute for the session of 1890, but owing to ill health was unable to preside. We owe several valuable gynæcological contributions to his pen.

* * *

—Those who are enthusiastic advocates of corrosive sublimate as a disinfectant and antiseptic agent will find some exceedingly interesting reading in the *Bulletin of the Johns Hopkins Hospital* for April, 1891. In that issue Dr. Abbott relates in detail a long series of experiments undertaken with the view of ascertaining the value of corrosive sublimate as a disinfectant against the staphylococcus pyogenes aureus. These experiments avoid the minor irregularities to be noticed in those of Dr. Abbott's predecessors, and may be regarded as fairly conclusive, and the author is apparently justified in drawing the following inferences as resulting from his observations:

1. It is seen that under the most favorable conditions a given

amount of sublimate has the property of rendering inert only a certain number of individual organisms. That is to say, the process is a definite chemical one, taking place between the protoplasm of the individual bacteria and the sublimate in the solution.

2. That the disinfecting activity of the sublimate against organisms is profoundly influenced by the proportion of albuminous material contained in the medium in which the bacteria are present.

3. That the relation between the golden pyogenic staphylococci and sublimate is not a constant one, organisms from different sources and of different ages behaving differently when exposed to the same amount of the disinfectant, for the same length of time.

4. That the organisms which survive the exposure to the sublimate, may experience a temporary attenuation. This attenuation, however, may be caused to disappear by successive cultivation in normal media.

5. That by the method employed in these experiments it is possible to select from a culture the most resistant forms in that culture.

6. That many of the results of previous experimenters, who have assigned to corrosive sublimate more powerful disinfectant properties against the staphylococcus pyogenes aureus in cultures than the observations reported in this paper indicate, are attributable to the neglect of certain precautions now recognized as essential to the proper conduct of such experiments.

In the light of these experiments and those of the experimenters quoted in this paper, it is plain that for use in surgical practice the solutions of corrosive sublimate do not possess all of the advantages hitherto attributed to them.

To the employment of sublimate solutions upon wound-surfaces it is plain that there exist at least two serious objections.

First, the albumen of the tissues and fluids of the body tends to diminish the strength of, or indeed renders entirely inert, the solution employed.

And second, the integrity of the tissues is materially injured by the application of solutions of this salt.

The first objection cannot be met with certainty, for the surgeon possesses no means by which he can determine the amount of albuminous material with which his solutions are to come in contact, and in any case this large amount of albuminous material is an almost insuperable obstacle to complete disinfection with sublimate. He is, therefore, never in a position to say, *a priori*, that his efforts at disinfection of the wound are or are not successful.

The second objection is equally serious. During the past two years we have had sufficient evidence to lead us to believe that the normal tissues and fluids of the body possess the power of rendering inert many kinds of organisms which may have gained access to them. This function is therefore diminished, or, indeed, may be quite destroyed, by any agent which brings about alterations in the constitution of these tissues. We know that just such changes as those to which we refer are known to follow the application of sublimate solutions. It is plain, then, if we bring about in these tissues a condition of superficial necrosis, the condition following upon the application of sublimate, they are much less able to resist the inroads of infectious organisms than they would have been had they been left in their natural condition.

As a disinfectant, in the strict sense of the word, there are perhaps few substances which possess the property in a higher degree than does corrosive sublimate, but at the same time there is nothing which is employed for this purpose that requires greater care in its manipulation in order to obtain its best results than does this salt. As we have seen, its action is influenced by a number of conditions which in practical application it is difficult if not quite impossible to control.

For these reasons we seem hardly justified in continuing to give to it the first place in the list of substances which may be employed practically for the purpose of rendering harmless, materials containing the germs of infectious maladies.

* * *

—Homœopathy receives another honor in the appointment of Dr. Phil Porter, of Detroit, Mich., as Medical Director of the Columbia Construction and Improvement Company. This com-

pany are constructing a railroad 2000 miles long, from Buena-ventura, in the Republic of Columbia, to Carthagena. Dr. Porter hopes to dispose of his valuable special practice, so as to leave for South America by January, 1892. As the doctor will remain in the Republic of Columbia for five years, we anticipate some gynæcological work in the South that will astonish the natives, for our acquaintance with South American literature indicates that gynæcology is at a very low ebb down near the equator. We congratulate Dr. Porter on his appointment.

● GYNECIC ETCHINGS. ●

—Professor Kisch, of the Prague medical faculty, has made a careful study of tachycardia at the menopause, and makes it the basis of an able article in a recent number of the *Prager Medicinische Wochenschrift*. Kisch is in practice at Marienbad and has ample opportunities for studying the complex circulatory disturbances of the climacteric, as this resort is very popular among women approaching change of life. An editorial in the *N. Y. Medical Journal* sums up Kisch's clinical picture of the disease as follows: At the time of the menopause, occasionally after the cessation of the menses, but most frequently between the ages of forty and fifty years, when the menstrual flow is beginning to show signs of change, paroxysmal attacks of palpitation may occur in women whose heart's action has previously been quite normal. These attacks sometimes come on without any provocation, and at other times they are evoked by slight causes, such as would have no effect in a normal state of health. The attacks may come on while the patient is in any posture—walking, sitting, or lying down, and even during sleep. The subjective symptoms accompanying the attacks are a feeling of oppression and of anxiety, throbbing in the carotids and in the abdominal aorta, severe headache, and fugitive sensations of heat and of a rush of blood to the head. Occasionally there are noises in the ears, flashes of light before the eyes, and dizziness, and, in rare cases,

syncope may occur. Objectively, it is found that the pulse numbers from 120 to 150, and may even reach 200. In most cases it is full, powerful, and regular. The sphygmographic tracings show a high pulse wave, a rapid and abrupt rise of the ascending line, and an equally rapid and abrupt fall of the descending line. Redness of the face, neck, and chest is occasionally noticed. This may appear only in patches, disappears in a few minutes, and is attended with a burning sensation. Free perspiration on the head and back occurs at times. The attacks may come on several times in a day, and last from a few minutes to a quarter of an hour. Associated with these cardiac disturbances there are usually uneasiness of mind and body, disability for continuous work, and restless sleep disturbed by dreams. In Kisch's cases anæmia did not exist; on the contrary, there was a tendency to plethora, and the patients had a dread of a stroke of apoplexy. The duration of the affection may vary from a few weeks to two years and longer.

In the tachycardia of the menopause the author thinks the etiological factor is hyperplasia of the ovarian stroma. This increase of connective tissue in certain predisposed individuals acts in some way, unknown as yet, upon the terminal nerves of the ovarian tissue and, through them, in a reflex manner upon the sympathetic nerve—the accelerator of the heart. This assumption receives support from the fact that tachycardia is frequently seen after the operation for the removal of the ovaries, which is followed by a shrinking process of the internal genital organs. In the way of treatment, the author has obtained the best results from a systematic course of mild purgatives, suitable dietetic and hygienic regimen, such as mountain air, a bland diet, and active bodily exercise, and wet applications to the lower part of the abdomen. A course of some weeks at Marienbad is usually followed by improvement. Small doses of the bromides generally afford relief from the unpleasant sensations attending the attacks.

—Dr. H. Löhlein (*Centralbl. f. Gynäk.*, March 7, 1891) describes a case where the uterus was affected with cancer in a pregnant woman. A firm mass occupied the posterior part of the cervix. The patient was forty-three years old, and was sent to hospital on

November 15, 1890, about a month before the completion of term. Preparations for Porro's operation were made, in case the cervix might prove undilatable. But pains came on, and the foetal head was found bearing well down. The forceps was applied, and the patient easily delivered of a living child on November 20; no flooding followed. On December 5 the cancerous mass was scraped away as much as possible. On December 18 the uterus was entirely removed. First, the cervical canal was well washed out with a five per cent. solution of carbolic acid, and plugged with iodoform gauze. The os was sewn up with three sutures. A very large number of vessels required ligature, and the uterine tissue was exceedingly brittle, so that its entire removal proved difficult. The wound in the vaginal wall was united on both sides by a suture, and drained by a loose roll of gauze. There was high temperature on the second and third days, but no other serious symptom. On December 31 the patient left the hospital in good health. On January 11, 1891, she was well and strong, the cicatrix was healthy, and there were on both sides of the pelvis traces of para- and perimetritic exudation. Dr. Löhlein comments on the case and compares it with Spencer Wells's and Zweifel's operations for the removal of the cancerous uterus in mid-pregnancy.—*Brit. Med. Jour.*

—Dr. George Granville Bantock, of the Samaritan Hospital, London, now arrays himself against the conclusions of Noeggerath and those who think with him that gonorrhœa plays so important a part in the production of sterility. Thus he states: "My own observations fail to supply me with a single instance in which gonorrhœa has produced sterility in the male. One striking example comes before my mind of a gentleman whose wife was barren. This fact might be seized on as a case in proof were it not for the fact that he was anything but impotent or sterile in the case of another woman, to my certain knowledge.

"As the result of my inquiries at the Lock Hospital and among numerous general practitioners, I have failed to find any evidence to support the statement that this disease 'gives rise to a group of diseases, etc., which surpass in importance any other class of affections with which the gynecologist has to deal.' In the Lock

Hospital I was informed by the house-surgeon that he was unaware of a single instance of pelvic disease following gonorrhœal infection. General practitioners tell pretty nearly the same tale of numerous examples of gonorrhœa in young men—marriage, no evil consequences. Listen to what the late Dr. Bumstead said in the fifth edition of his work on venereal diseases, in a very short notice of Noeggerath's extreme views, and in which he employed a weapon which, according to the French proverb, is so deadly—namely, ridicule. He said that at one of the annual meetings of the British Medical Association, one of the speakers announced that Dr. Noeggerath's views were so generally known and accepted in America that one of the first questions asked by the parents of every young lady to whom marriage was proposed by a gentleman, was whether he had ever had the clap. 'In short,' he adds, 'even if 800 out of 1000 men have had the clap, the human race did not die out long ago, but still exists, and shows no tendency, as far as I know, to diminution.' But a more sober testimony—and it is the last quotation I shall trouble you with—on the authority of Sinclair, is that offered by Martineau, who, after a very long experience and an enormous amount of material from which to form conclusions, says: 'You will find by a close examination of the material that primary uterine blenorrhagia is extremely rare. In about 2000 cases I have seen it only ten times at most. You will find, further, that ovaritis and salpingitis are so rare that I have not been able to pick out a single case. As to pelvic peritonitis, I have found it only twice.' My opinion, then,—an opinion founded on my own observation and on a study of the literature of the subject,—is that 'the importance of gonorrhœa as a cause of pelvic inflammation' consists in the fact that in a few or limited number of cases it seems to be capable of producing most serious symptoms, rarely, however, terminating in death, and that this importance is diminished by the fact that these cases are comparatively very rare."

Our subscribers can very probably tell a very different story, and we hope to see them array a series of convincing facts on the opposite side of this question. Papers on this subject, containing clinical fact, will be very welcome to our columns.

—Kidney disturbances are sometimes due to dragging on the ureters by a tumor or by a deviated uterus or by the extension of an inflammation of the cervix to the ureters.

—The four great causes of sterility in prostitutes are: 1. Blennorrhagic metritis of the cervix. 2. Obliteration of the tubes in consequence of infectious or simple inflammatory salpingitis. 3. Nervous disturbance caused by frequent coitus and producing abortion in the first months, often passing unperceived, and which is, besides, usually only shown by a more abundant menstruation at the time of the accident. 4. Early criminal abortions.

Besides these causes we might mention, were it not a common fact, the hygienic precautions of which these women make use.

—Frommel advances an operative treatment for uterine retroflexions, which aims at maintaining the uterus in anteversion by fixation of Douglas's folds to the lateral walls of the pelvis.

The operation is performed as follows:

1. The patient is placed with the hips very high, to permit the intestinal bundle to glide out of the pelvis.

2. The uterus is liberated from its adhesions and drawn forward.

3. A needle is passed through the retro-uterine ligaments near their insertion on the uterus and they are sutured to the lateral walls of the pelvis, in such a way as to draw them tense and to direct them from before backward.

The suture is best made with silk or silk-worm gut. In cases of extreme relaxation of the folds, they are fixed very high up, toward the superior strait; in cases of moderate relaxation they are fixed low down. After the cure, the uterus preserves its mobility. In spite of his successes, Frommel only advises this operation after other treatments fail.

—The fluid extract of *collinsonia canadensis* is recommended by Hockin and Shoemaker (*Gazette de Gyn.*) as useful in gravel, blennorrhagia, and leucorrhœa.

—Dr. Kleinschmidt (*Archiv. f. Gynäk.*, vol. xxxix, part 1, 1890) has collected the recorded cases of primary sarcoma of the cervix, and added an unpublished case, from Professor Winckle's

practice. The tumor grew from the posterior lip of the cervix and adjacent part of the posterior vaginal fornix. It was lobulated, soft, and very easily broken down when touched. In structure, it was a spindle-celled sarcoma. The tumor was three times removed by operation. After the first, the patient remained in good local and general health for a year; within that space of time she became pregnant, and was delivered at term without instruments. At length the growth returned, but after the second operation recurrence took place at the end of two months. Total extirpation of the uterus was out of the question, as there was a hard deposit in the left parametrium. At each operation the tumor was simply removed by the knife, the wounded surface being scraped with the sharp spoon and burned with the thermocautery. In hitherto published cases, as in Winckel's, recurrence usually took place at the site of the primary growth. Metastatic deposits were frequently detected. The prognosis is highly unfavorable, relatively as well as generally; in short, sarcoma of the cervix is quite as bad as the more frequent malignant disease of that part—carcinoma.—*Brit. Med. Jour.*

—At a meeting of the Dresden Gynæcological Society in January, 1891, Dr. Meinert read a paper embodying the results of sixty-three post-mortem examinations of patients in whom the thorax was compressed by stays. The normal relations were invariably disturbed. The liver and stomach were usually pushed downward, more rarely upward, and in the majority of cases enlarged. The stomach mostly lay with its long axis vertical, and often fitted into a corresponding depression on the surface of the liver. Depression of the great intestine was almost constant, the hepatic flexure being most involved. The transverse colon was often distorted in the most remarkable manner, hanging down in some cases so that its middle part almost reached the pelvic cavity. In these displacements the stomach had, as a fixed point, its cardiac end, the large intestine its splenic flexure. Equally precise determination of the displacements of the female organs was not possible, owing to senile changes in many of the bodies. The right kidney was frequently movable, as many recent authors have already noted. Dr. Meinert believes that, in living women, retro-

flexion is the most frequent displacement of the uterus. A case of nephrorrhaphy for floating kidney was also noted ; three-quarters of a year after the operation the kidney again became displaced. Bergmann has observed similar failures ; it is certain that women who have undergone nephrorrhaphy should not wear stays. The median displacement of the stomach and the pushing down of the colon was best diagnosed during life by forcing air into those parts of the alimentary canal. The displacement and distention were to be remedied by small meals, taken frequently, and by avoiding fluids in bulk which injured the stomach. The diet must be substantial and of a nature to stimulate peristalsis ; hence a kind of whole-meal bread was recommended. Indeed, Dr. Meinert advocated the swallowing of small quantities of sand for "internal massage" of the stomach. External massage was good, especially on a full stomach. It may be remembered that at the International Medical Congress, London meeting, 1881, there was some discussion as to whether the long axis of the stomach was not normally vertical. Dr. Leopold stated, in reply to Dr. Meinert, that he had seen the stomach so placed in cases where there was no constriction of the thorax from stays. Some of the changes in the hollow viscera might be due to defective nutrition.—*Ibid.*

—*The Therapeutic Gazette* has a very excellent review of the present status of the knowledge of chlorosis, especially as to certain complications. Thus the report says :

"The manifestations of chlorosis may occur in the most varied forms, and in certain complications they are a source of great danger, seriously interfere with a favorable prognosis, and cause difficulty in the diagnosis. Two of these especially deserve attention—thrombosis and fever. These two complications have been made the subject of an essay in the *Revue de Therapeutique Medico-Chirurgicale* for February 1, 1891, by Dr. Sicard, who calls attention to the fact that thrombosis in the course of chlorosis nearly always occurs in the form of phlegmatia alba dolens, which is a rare complication, it must be admitted, though numerous cases have been reported in the last few years."

—Trousseau, many years ago, was the first to recognize its

existence and stated that undoubtedly the reports of the frequency of the complication would be much greater if attention was directed to the possibility of its occurrence. Thrombosis may occur in any period of chlorosis, but it especially occurs when the disease is severe and undergoing rapid progress, although it may also occur in case of moderate severity, and ordinarily makes its appearance at the commencement of the affection, when the cachetic condition has not yet been developed. This complication may appear spontaneously, but fatigue should be considered as a predisposing cause. The lower extremities, and especially the left leg, is ordinarily the seat of a venous thrombosis. It has, however, been recognized as occurring in the vessels of the upper extremities, and sometimes even in the cephalic blood-vessels, but in the latter condition the thrombosis may even occur in the arteries, especially the artery of Sylvius, or sometimes in the venous sinuses. Perhaps in this latter case the immediate causes of thrombosis have not always been eliminated, such as severe affections of the middle ear or infectious tonsillitis.

—A case reported by Charneil proves the reality of thrombosis of the sinus due to chlorosis. The case was that of a young woman, twenty-four years of age, free from any syphilitic, tubercular, or rheumatic affection, in whom severe cerebral symptoms developed after exposure to the sun. There was violent headache, insomnia, disturbance in the co-ordination of the pupils, delirium, and coma resulting in death. The autopsy demonstrated cerebral softening, due to a thrombosis of the superior longitudinal sinus. Vergely, also, has related two cases of arterial thrombosis occurring in chlorotic cases in whom at the autopsy the left Sylvian artery was found obliterated by a clot. In addition to the state of the blood, which predisposes to coagulation, the condition of the circulation in the Sylvian artery favors the production of this accident.

—Rendu has reported an observation of spontaneous thrombosis occurring in the pulmonary artery during the course of chlorosis. With the exception of these very rare cases, thrombosis in chlorotic patients nearly always occurs in the veins of the lower extremities, usually on the left side, and so is a true phlegmatia alba

dolens, whose anatomical location may be attributed to the readiness with which circulation in the left iliac vein may be compressed by distention of the sigmoid flexure. Consequently, it occurs usually in patients subject to constipation.

—The phlegmatia of chlorotic patients usually appears suddenly ; pain of moderate intensity occurs in the calf of the leg, and radiates through the leg, either downward or toward the thigh. At the outset, walking is not interfered with, and the accustomed occupation is not necessarily stopped ; however, by the end of two or three days, the intensity of the pain becomes such that the patients are forced to remain in bed. It may be noted that the œdema is the first symptom to call attention to the disease, and this may occur either in the upper part of the thigh or in the calf ; but it is always very rapid, more so than in the phlegmatia of other causes.

—The beginning of thrombosis is also indicated by fever, which, in some cases, precedes by one or two days the appearance of the complication or even the first signs of pain. The temperature, more elevated in the evening than in the morning, may pass 104° F., but the thermic curve possesses no special characteristics. The febrile excess is proportionate to the extent of the local lesion and the degree of lymphangitis, or to the presence of other complications, which should be always looked for. The aspect of the limb is similar to that observed in cases of phlegmatia : there is white œdema, with extensive infiltration of the part, while red and painful streaks denote the inflammation of the cutaneous lymphatics. Palpation causes acute pain over the course of the affected veins, and should the pain not be very severe, the veins may be recognized under the fingers in the form of solid cords. Exploration, however, should be performed with the greatest care, and should not be prolonged, as it is by no means free from danger.

—Blanc communicates a note on syphilitic rigidity of the cervix (*Lyon Med.*). Among the causes of dystocia we recognize an anatomical and pathological spasmodic rigidity. Doléris has noted several cases of syphilitic rigidity. The following observation appears to be a new example :

A woman having had two normal and rapid confinements was confined last November. This time the dilatation was very slow. On the middle of the anterior face of the vagina, there existed a sclerosed patch extending on to the cervix. This patch, the anterior half of which presented sclerotic indurations, was irregularly tumefied. The dilatation was the size of a dollar.

After waiting some hours, there was an indication to hasten. Blanc practiced lateral incisions of the cervix and applied the forceps. The child, living, succumbed after some days, in a cachectic condition.

The patient's husband had had soft chancres on the prepuce and an indurated chancre in the balano-preputial groove, following secondary accidents two months before the confinement.

A doctor had found soft chancres and papulous syphilides with the patient herself. The hard, red tumefaction of the anterior lip of the cervix permitted the announcement of a probable dystocia. In this case the diagnosis is certain; it relates to syphilitic induration caused by primitive localization on the cervix.

The syphilitic rigidity may be due to the chancre, which leaves a deep and persistent induration after its cure.

In three observations the rigidity was due to the localization of papulo-erosive plaques on the cervix.

It is impossible that tertiary accidents can produce such a rigidity.

To explain the rarity of this rigidity with reference to the frequency of syphilis, the following reasons may be given:

These ulcers must occur on the cervix and they must have a certain dimension. More, medical treatment produces a more or less great modification of these syphilitic accidents.

To remedy this cause of dystocia, incisions of the cervix must be made. These should be carried at once up to the insertion of the vagina. At this time, the head is sufficiently fixed not to cause greater lacerations. On the contrary, small incisions necessitate lacerations, and their direction is not known.

After the confinement it is preferable to suture the cervix to avoid hæmorrhage and septicæmic or secondary accidents, which might be produced.

● GOLDEN GRAINS. ●

—With regard to a series of experiments on the action of cod liver oil upon tissue metabolism in children, Dr. Ippolitov formulates the following :

1. The internal administration of white cod liver oil, of almond oil and lipanin, diminish to a marked extent tissue metamorphosis, especially lipanin.

2. Morrhuol and yellow cod liver oil increase metabolism to some extent.

3. None of these substances has any marked influence upon the assimilation of the hydro-carbonaceous elements of the food.

4. The increase of the bodily weight is apparently most pronounced after the use of lipanin, and nearly as great after the use of white cod oil and almond oil.

5. According to the results of these experiments, the yellow cod liver oil must be regarded as a very different substance than the white.

6. Lipanin cannot serve as a substitute for yellow cod oil.—*Centralbl. f. Klin. Medicin.*

—As a result of the use of Koch's treatment in ten cases of diseases of the eye, Königshöfer reports that in four cases of eczematous ulcers of the cornea in scrofulous children and two cases of tubercular disease of the lids, one of interstitial keratitis, the effects were favorable. In three cases of iritis no results were reached.

—A case of "foetus in foetu" is recorded by Dr. Kolisko in the *Wiener Med. Wochenschr.*, No. 20, 1890. An infant was born healthy in appearance, but the abdomen was distended, especially on the right side. Fluctuation was detected, and cyst of the right kidney diagnosed. On tapping, a pint of a brownish fluid escaped. The child died, when five weeks old, of bronchitis, with pemphigus and fever. A cyst was discovered in the abdominal cavity, reaching from the liver to the pelvis, and invested anteriorly by peritoneum. It arose from behind the right kidney.

Two prominences arose from its inner wall. One was of the size of a plum and covered with epithelium ; it bore an appendage like a rudimentary limb, and was connected with the opposite side of the cyst by a fibrous band. This band was probably the imperfect funis described in other cases of included foetation. The second prominence included unmistakable rudiments of a face ; not only teeth and lower jaw, but a tongue was also detected. In the case described by Nathaniel Highmore (second of that name, and not the Highmore associated with the antrum) in 1814, the foetal cyst was intimately connected with the duodenum and jejunum, and its cavity was so vascular that the patient, a boy aged fifteen, died of hæmorrhage. In G. W. Young's case, the cyst apparently arose from between the mesocolon and mesentery ; the patient lived nearly ten months. The parts from Young's and Highmore's cases are preserved in the Museum of the Royal College of Surgeons.—*Brit. Med. Jour.*

—A. Vitti reports in the *Centralblatt f. Gyn.*, a case of a woman who was seized with a double lobar pneumonia in the ninth month of pregnancy and died thirty hours after delivery. The child died sixty-seven hours after birth. Post-mortem examination of the child revealed a left-sided pneumonia with fibrinous pleurisy, pericarditis, and peritonitis. Pneumococci were found in abundance in the spleen, and in the exudates of the lungs and of the serous membranes.

—Krykus (*Paris Med.*) draws the following conclusions from statistics which he has collected from syphilitic subjects : Syphilis is a very frequent cause of abortion and of mortality in children. The proportion of abortions and of premature deliveries is from 24 to 38 per 100. Syphilitic children die in the proportion of 48 to 100 from paternal syphilis, and 78 to 100 from mixed heredity. The age of the disease weakens the influence of syphilis to a proportion in children of 40 deaths per 100. Heredo-syphilitic children generally die in the first months of their existence. They may live several years and die from late cerebral accidents. Fournier supposes that syphilis is the cause of congenital malformations. Lannelongue partakes of this opinion.

—An interesting note on the endocarditis of chorea has been contributed to the *Revue Mensuelle des Maladies de l'Enfance* (May, 1891) by M. E. Leredde. The note refers to a case of chorea in a boy aged four and one-half years. The temperature became elevated about the beginning of the third week. After about ten days of irregular pyrexia a systolic bruit developed at the apex; subsequently a thrill became perceptible at this point, and a little later a double aortic murmur. There was albuminuria for a short time, but the patient ultimately made a good recovery after about three weeks of acute illness; he left the hospital with the physical signs of mitral and aortic insufficiency. There was no affection of the joints at any time during the illness. At the suggestion of Dr. Hutinel, M. Leredde made cultivations from the blood obtained from the finger. These cultivations showed that from the third day (at which date they were begun) after the endocarditis was first observed until the fever ceased, the blood always contained the staphylococcus albus, and, on one occasion at least, the *s. aureus* also.—*Brit. Med. Jour.*

—Several cases of spinal paralysis in children are reported by Charcot in a recent number of the *Journal de Medecine et de Chirurgie*. In examining into the antecedents of these cases a family history of nervous disease is frequently found. Hysteria, epilepsy, insanity, and various other nervous affections are not uncommon. This is, however, in contradiction of Cordier and others, who have seen the disease occur epidemically. In one case reported by the author, fatigue seemed to play an important etiological rôle. On the third day, after excessive fatigue, the child became delirious and one of the legs was found to be paralyzed. The case was peculiar from the fact that but one limb was attacked at the outset. The paralysis did not change from place to place and finally locate itself in one member, as is frequently the case. Pain, though a rare symptom, was present in this case. It was confined to the sciatic region and was very severe. Complete loss of all electrical reaction indicated that all hope of cure was gone. A second patient was attacked without apparent cause. Chilliness was the only symptom at the onset, and was followed in the evening by paralysis of the left leg. On the fol-

lowing day the left hand also was involved. The bladder was soon affected, which resulted in retention of urine for several days. This is a symptom of frequent occurrence in children.—*N. Y. Med. Jour.*

—In the treatment of tuberculous women during pregnancy it is interesting to study the effect of injections of Koch's fluid on the uterus and on the foetus. Olshausen and John Hofmeier have used it, up to the present time, during pregnancy in three cases, and they were able to show that it does not excite labor pains. There is, therefore, no danger of abortion during the treatment. Olshausen could not find any evidence of influence on the foetus; the frequency of the heart sounds remained unchanged, while Hofmeier observed a certain restlessness of the foetus and increase of the frequency of the heart sounds from 132 to 180, especially on the day following the injection.

—Out of fifty-seven recent total extirpations, Kaltenbach has only had two deaths. One of these occurred in consequence of anæmia, from ligature of the left ureter and also, perhaps, from wound of the bladder. In fact one of the dangers of this operation is injury to the ureters or to the bladder. In two cases, Kaltenbach was obliged to perform a subsequent colpocleisis on account of a vesico-vaginal fistula. In three cases, the women being over sixty years of age, grave pulmonary affections followed, but these patients were previously affected by bronchitis, emphysema, and cardiac weakness. Kaltenbach gives great importance to suture of the peritoneum and to antiseptic measures. He used, by preference, solutions of salicylic and boracic acid.

—In the *Revue Med. Chir. des Mal. des Femmes*, Jules Chéron states *salicin* is an especial anti-rheumatismal remedy, having the same therapeutic properties as the salicylates and presenting the advantage of being better tolerated by the stomach. He states that in pelvic pain during the course of metritis or salpingo-oovitis as well as in pelvic cellulitis and peritonitis, particularly if these troubles are associated with rheumatism, that salicine is of value. In those women who, after the menopause, have uterine pain and discomfort in the lumbar or sacral region, with occa-

sional flushes of heat and neuralgic dartings, a careful interrogation as to any history of rheumatism should be sought for, and if this disease is found to be present salicine administered. The dose which he ordinarily recommends is fifteen grains to be divided into three parts. Very soon after the drug is administered the pain decreases. Chéron generally directs that one drachm of salicine be divided into twelve capsules. One of these capsules may be given morning, noon, and night, the patient taking a glass of water at the same time, to prevent irritation of the stomach.

—Dr. Engelmann (*Annals of Gyn., Obst., and Pæd.*) sums up a very valuable paper on "The Health of the American Girl," especially as to the causes of nervous and physical prostration, with impaired circulation and digestion, imperfect menstruation and diminished reproductive power, by indicating the following factors :

1. Over brain work and nerve strain, with neglect of the physical system, in education.
2. Nerve strain, and partial or incomplete muscular activity, in labor—both influences which are inseparably connected with, and complicated by, causes more active and independently potent ; which are :
3. The ignoring and neglecting of functional hygiene.
4. Physical and emotional strain of society, improprieties of dress, and over-stimulation of the senses.

—Hart (*Ed. Med. Jour.*), in the course of a paper on "Displacement of the Placenta in Extra-uterine Gestation," presents his views of the gross anatomy of extra-uterine pregnancy in the following tabular statement :

1. Ovarian (extremely rare).
2. Primary intra-peritoneal (not proved as yet, and improbable).
3. Fallopian tube : interstitial ; in isthmus ; in ampulla usually ; tubo-ovarian not well demonstrated. From fallopian tube form we may get :
 - a. Rupture and intra-peritoneal hæmatocele (first to third month).

b. Development in tube to nearly full time (exceedingly rare).
c. Development into broad ligament (intra-ligamentous ; sub-peritoneo-pelvic).

1. Continued extra-peritoneal development, with placenta below ; may get living child.

2. Development with placenta displaced ; death of child ; supuration and discharge by bowel.

3. Development with placenta below, extra-peritoneal and not displaced ; child may escape with or without amnion into peritoneum.

So-called "abdominal pregnancies," *i. e.*, advanced extra-uterine gestation, may arise as follows :

a. From an early rupture (up to the third month) of a fallopian tube gestation, the foetus only escaping, the cord remaining unruptured, and the placenta remaining and developing in the tube.

b. Development from fallopian tube into broad ligament ; foetus escaping into peritoneum ; placenta remaining behind in extra-peritoneal tissue.

c. Development of foetus and placenta entirely extra-peritoneally.—*Brooklyn Med. Journal.*

—Muller presents an article on tuberculosis in children (*Jahrb. f. Kinderh.*) that contains some very valuable statistics. The author's observations are based on five hundred autopsies at the pathological institute at Munich, between the years 1881 and 1889. Of this number there were one hundred and fifty cases of tuberculosis, 41.3 per cent. of which occurred between the second and fourth years of life. This is also the period in which measles mostly prevails. As to mortality, fifty per cent. of all fatal cases of tuberculosis occur before the fifth year of life. There are probably more deaths from tuberculosis in children than in adults. More males suffers with tuberculosis among adults than females, while in children the reverse is true, with the exception of the years from four to six and from eleven to fifteen.

In 92.67 per cent. of cases the lungs were diseased ; in 84 per cent., the lymph glands ; in 65.33, the pleura ; in 43.33, the spleen ; in 38, the intestine ; in 33.33, the liver ; in 26.66, the pia mater ; in 23.33, the kidneys ; in 22, the bones and joints ; in 18,

the peritoneum ; in 8, the brain ; in 4.66, the heart ; in 3.33, the stomach ; in 2.66, the larynx ; in 2, the tonsils ; in 2, the pericardium ; in 1.33, the spinal cord ; in 1.33, supra-renal capsules ; in .66, the œsophagus, parotid, submaxillary, thymus, or female genitals. Of one hundred and thirty-nine bodies in which the lungs were tuberculous there were sixty-eight in which there was only cheesy pneumonia. The greatest number of tuberculous lung-diseases were in the fourth year of life ; the greatest number of cases of cheesy pneumonia were in the second year. The relation of cheesy pneumonia with measles must not be disregarded. Those parts of the lungs near the hilum were mostly involved in tuberculosis. As the lymph-glands are frequently involved, the probability that neighboring organs will be infected is apparent. In 81.74 per cent. of cases the bronchial glands were tuberculous ; in 57.14, the mesenteric ; in 11.11, the mediastinal ; in 8.75, the cervical ; in 7.14, the retro-peritoneal ; in 4.76, the portal ; in 3.17, the epigastric ; in 2.38, the retro-maxillary and inguinal. The intestine is seldom the avenue for tuberculous infection in children ; if it becomes involved the lungs are usually involved also. The lungs are so often involved in childhood because infectious material can pass the alveolar wall without hindrance, and reach the bronchial glands. The bacillus tuberculosis causes general infection less frequently through the lymphatic than through the blood channels. The lymph-glands being often the primary seat of tuberculosis in children the disease may remain latent if the lymph-channels are obstructed, but the danger of general infection is always present. The rapidity with which tissue changes take place in children would also seem to offer opposition to the general spreading of the disease.—*Arch. of Pædiatrics*.

—In support of the theory that children should be vaccinated at a very early age, Max Wolff cites the following statistics in *Virchow's Archives* : In 1886, the number of deaths from variola in Germany was 155, 61 of which were infants of less than one year old ; in 1887 the mortality was 168, and of these 56 were less than one year of age. In the epidemic of variola in Königsberg in 1887, there were 159 cases of variola, 45 being observed in children of less than one year of age, and of this latter number 32 died.

—Drs. H. Mery and P. Bouloche, as results of their bacteriological studies made with saliva of children suffering from measles, offer the following statements (*Revue Mensuelle des Maladies de l'Enfance*, April, 1891):

The pneumococcus and streptococcus are met with in the saliva of children suffering from measles with much greater frequency than is the case in health. Broncho-pulmonary complications in the course of measles only occur, with but rare exceptions, in children in whom the saliva contains the pneumococcus and streptococcus. At the autopsy in fatal cases it is possible to follow the pathogenic microbes recognized in the saliva throughout the upper air-passages down to the finer bronchi. The frequent presence of the pathogenic microbe in children suffering from measles serves to explain the great frequency of broncho-pulmonary inflammations in such cases. The practical deduction to be drawn from this conclusion is that during the progress of a case of measles the most rigorous attention should be paid to buccal anti-sepsis.

—Dr. Voituriez (*Arch. de Tocol.*), after a study of polyuria, concludes, that, in the course of gestation, polyuria of a type entirely confined to pregnancy is sometimes observed. In such cases the urine is clear, slightly acid, and of normal composition, excepting that the proportion of water is greatly increased, so that the specific gravity is low. Sugar and albumen are alike absent, and no cystitis is present in cases of this affection. Polyuria of pregnancy is probably more common than is generally believed. The only way of authenticating a case is carefully to collect all the urine passed every twenty-four hours. The disorder is not usually detected until the middle of the pregnancy. It rapidly disappears after delivery. In nature it is exceedingly mild, and it appears to endanger neither the mother nor the child. Dr. Voituriez describes a case where a pregnant woman was compelled to make water over twenty-four times in twenty-four hours, passing over seven pints of urine daily. She suffered from slight thirst. Yet she was safely delivered of a living (first) child, which weighed nine pounds. Tarnier's forceps had to be used. Directly after delivery polyuria ceased and never recurred. The secretion of

milk was normal. Bromides and belladonna had been administered, but proved useless.—*Albany Med. Journal*.

—Dr. Mitchell (*Med. News*, March 7, 1891) reports the following: A married woman took a decoction of what she believed to be wild ginger (*asarum canadense*) to relieve amenorrhœa. She complained of pain in the mouth, throat, stomach, and bowels of a continuous and burning character. In the face, hands, and lower third of the forearms there was a pricking sensation, and there was burning about the wrists; the hands and fingers were much swollen. The skin and subcutaneous tissues of the face were much swollen, so that the eyes were nearly closed; the eruption resembled erysipelas, the skin was thickly covered with pimples and vesicles, and scattered among these were several blisters; the eruption was also present about the popliteal spaces. She had rigors, some fever, and a frequent pulse; there was nausea and vomiting. She subsequently had considerable swelling, pain, and heat about the anus and vulva, with swelling of the labia, nymphæ, and vagina, and a constant desire to urinate, micturition being difficult and painful. The patient recovered in about three weeks. Her little girl, who had taken a smaller dose, suffered from similar symptoms but in milder degree. The roots were from two to four inches long, of about the diameter of ryestraws, crooked and knotty, very brittle, and gave a pleasant aromatic taste when chewed, closely resembling that of cardamons.

—Dr. Jones read a paper before a late meeting of the Tennessee State Medical Society on "Indigo as an Emmenagogue," in which he said his attention was first directed to this drug as an emmenagogue in July, 1887, from an essay published in the *Medical and Surgical Reporter*, of Philadelphia, by Dr. S. L. Gount of Lafayette, Ind. Acting on the suggestions offered by Dr. Gount, he had used it in many and various cases.

His first case was a young lady, twenty years of age, who had not menstruated in five months. He had been treating her for three months with the usual remedies without any effect, so he made up his mind to give indigo a trial, which he did. He ordered indigo $\frac{3}{4}$ ij, subnitrate of bismuth $\frac{3}{4}$ ss, well mixed. Of this the patient took one-half teaspoonful in one-third of a glass

of water, three times daily, for nearly four weeks, when one day he was sent for in great haste. On his arrival he found the patient in bed, and comfortable. He was then told by the mother that her daughter, while walking in the garden, without pain or warning of any kind, began to flow. The gush was followed by a gentle flow, which lasted only for a short time. In five days she was well, and has not suffered from amenorrhœa since. Dr. Jones has since used indigo in thirteen cases with but one failure, and this case proved to be pregnant.

During the administration of the drug the os^vuteri becomes soft and patulous, admitting the end of the index finger. There is often a serous discharge from the vagina. The urine becomes brownish green in color, and its odor is offensive. The stools are watery and offensive.

—Kötschau reports on the use of ichthyol in diseases of women (*Frauenarts*) that he was led to use this drug in a case of painful pelvio-peritonitis with excellent results, after having observed that it acted well in relieving pain in cases of contusions or inflammations affecting joints, muscles, and bones. He then began to use it generally, and reports 127 cases, of which 28 were cases of endometritis cervicitis; 16 were cases of endometritis corpus uteri; 52 perimetritis (pelveo-peritonitis, exudations, salpingitis, and oöphoritis); 4 pure metritis, the adnexa not being involved; 27 cases of parametritis.

The cases of cervical catarrh were treated by making applications of ichthyol to the portio vaginalis. In acute cases six to eight applications were made in all, each one at an interval of three to four days and in conjunction with warm injections and general massage. Of the 28 cases, 19 were cured; the other 9 showed no improvement.

Applied to the body of the uterus it has proven as effective as iodine or chloride of zinc, and never causes the colicky pains which these drugs produce at times.

In the 52 cases of perimetritis, with the exception of 6, a rapid cure was effected. A ten per cent. ichthyol-glycerin solution was applied on tampons, these applications being made twice a week by the writer and daily by the patients themselves, the patients also taking sitz baths daily. In the 6 cases no improvement took place.

Of the 27 cases of parametritis, 5 were not improved, except to slightly diminish the pains, 12 were completely cured, and the remaining 10 were markedly benefited, though not entirely cured. In all of these cases ichthyol pills (o. r t. d.) were given internally. The pills seemed to improve the patients' appetites and to hasten absorption of the exudation.

In the 4 cases of metritis no benefit was obtained by the use of the drug.

The author, therefore, recommends the use of ichthyol; for even where it did not cure the disease, it frequently relieved the pains.

—The following is Dr. Nota's simple manner of treating umbilical hernia in children, as given in the *Gazzetta degli Ospitali* for November 23, 1890. His method is a modification of that recommended by Desault. The hernia being reduced and the umbilical ring closed by the finger, the sac, emptied of its contents, is held firmly by an assistant. Around its base is thrown a ligature of rubber tubing an eighth of an inch in thickness. Three or four turns are made with the tubing, held very tense and as close as possible to the abdominal wall. The two ends of the tube are tied together and the knot is secured with a ligature of silk. The whole is then covered with a little cotton and the children are left entirely free in their movements. After ten or twelve days, according to the size of the hernia, the sac falls off at the level of the ligature, leaving a small round opening of perhaps an eighth of an inch in diameter. This wound is dressed with iodoform and carbolized cotton, and closes in four or five days, leaving a smooth, regular cicatrix which prevents any return of the hernia. Dr. Nota has used this method with eighteen children, and effected a perfect cure in them all.

BOOK REVIEWS.

A TREATISE ON DISEASES OF THE EYE. By HENRY C. ANGELL, M. D. Boston: Otis Clapp & Son, 1891.

As this is the seventh edition of Dr. Angell's work, it should be well known to the profession. The present copy is the outcome

of the author's endeavor to revise it to correspond with present status of ophthalmological literature. We also recognize the master hand of our friend F. Park Lewis, of Buffalo, in a few additions here and there.

SUR UN CAS DE CHORÉE TRAITÉ PAR L'EXALGINE. Par le Docteur MONCORVO.

Moncorvo reprints from the Bulletin General de Therapeutic a report of a case of chorée markedly improved by exalgine. The patient was a girl eight years old. Treatment was begun on the tenth day of the disease. Three grains of exalgine were given daily at first, and subsequently increased to four grains and a half. The recovery was complete and rapid.

DU TRAITEMENT DE LA SYPHILIS INFANTILE PAR LES INJECTIONS SOUS-CUTANÉES DE SELS MERCURIEL. Par le Docteur MONCORVO et le Docteur CLEMENTE FERREIRA.

Dr. Moncorvo sends, with his compliments, a little brochure of fifty-one pages containing observations on forty-seven children, from thirty-eight days to fourteen years old, in whom subcutaneous mercurial injections were employed in the treatment of infantile syphilis. As a summary the following conclusions are drawn :

I. The hypodermic method should now be admitted in the treatment of infantile syphilis.

II. Among the various mercurial preparations experimented with, we prefer the *gray sil* among the insoluble salts, and *corrosive sublimate* among the soluble salts.

III. Injections of *gray sil* and of *corrosive sublimate* were perfectly well tolerated by the young patients and gave marked benefit.

IV. The mercurial injections were always preceded by vigorous antiseptic measures, thus permitting us to shorten the interval between the injections, some being given at four days' interval.

V. The results obtained by the use of mercurial injections have been generally favorable, and the efficacy of the procedure does not appear inferior to that of other methods of administration.

VI. Cutaneous syphilides (papules, pustules, gumma, etc.) are promptly influenced by the hypodermic method; the action on adenopathies is more slow.

VII. In a general way the hypodermic mercurial treatment is admirably tolerated by children, in view of general and local accidents. This probably depends on the fact that young subjects easily tolerate mercurial preparations.

THE HOMŒOPATHIC JOURNAL OF OBSTETRICS, Gynæcology and Pædology.

A. L. CHATTERTON, EDITOR AND PUBLISHER.

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RESOURCES OF GYNÆCOLOGY—ADJUVANTS,
OR AIDS, TO GYNÆCOLOGY, NEITHER MED-
ICAL NOR SURGICAL.

BY

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BOSTON, MASS.

As homœopathic physicians, whether gynæcologists or otherwise, we are all practically agreed in regard to therapeutics; at least, our opinions and our practice are similar, and as regards surgery, none will question that it has its place; that it is in some instances, at least, the best, if not the only, means of cure. But with the class of gynæcological resources designated adjuvants, or the aids to gynæcology, whether medical or surgical, it is well known that some among us feel with undoubted sincerity that we should have nothing to do. That to use, or even suggest, the need of means of relief and cure other than the administration of the homœopathic remedy is rank heresy—not to be tolerated in any homœopathic society.

It is apparent, therefore, that to me has fallen the bone

of contention ; that it is made my duty to bring into this arena the red flag which has so often provoked attack, and to defend the claim of practical gynæcologists to the right of recognition as homœopaths ; or, to reverse the statement, the right of homœopaths to all the resources which science and common sense prove to be real aids to cure.

In doing this, it will be my purpose to avoid rather than engender animosity or dissension, and to convince even our accusers that to misconception, misapprehension, or blind prejudice on their part, rather than to any real violation of principle on ours, are due the harsh accusations, the reproaches, and the sneers which have been so frequently hurled at gynæcologists.

While we recognize in the *similimum* the most potent and reliable means of curing either disease or functional derangements in gynæcological as in all other branches of practice, it should be remembered that very few remedies have been proved by women with a view to observing the effects upon the sexual organs, and that, therefore, the totality of symptoms corresponding to our gynæcological cases can rarely be found in provings, nor even in the recorded symptoms contained in our *Materia Medica*, a large majority of which are only clinical observations of varying reliability. Hence the use of remedies thus selected is largely empirical ; just as much so, in fact, as is the use of other agents ; and it is this want of any sufficient reliable resources in therapeutics which renders the need of aids or adjuvants in gynæcology more frequent and more imperative than in other departments of medicine.

Then, too, the pelvic organs in women, more than any others, are exposed to dangers and abuses, to dislocations, injuries, and adventitious growths which necessitates the consideration of other conditions as well as, and in connection with, the subjective symptoms. That is, the basis of treatment in gynæcology must be a definite knowledge of the existing condition of the affected parts and its cause ;

and in the fact that this requirement is generally ignored by our critics, lies one of their chief stumbling blocks.

That the well-selected remedy may, in some instances, relieve the symptoms for which it is prescribed, despite the ignorance, on the part of the prescriber, of the causative conditions, will not be denied; but such practice is no less unscientific or unwarrantable than in a case of fractured bone or of a foreign body in the eye; and as the claim of a radical cure of these latter conditions by the administration of a remedy without an examination of the parts in question ever having been made, would never be recognized as reliable or trustworthy, so we cannot recognize the claims of those who, without physical examination of their patients, report the cure of misplacements, lacerations, and tumors of the uterus; and in either instance we should feel justified in saying that the conditions assumed to have been cured having never been demonstrated, it is more than probable that they were never present.

Granted, however, as a starting point or basis of comparison, a correct diagnosis, a just consideration of the physical conditions, as well as the nerve complaints, the objective symptoms, as well as the subjective, or, in other words, the *totality of symptoms*, and we will welcome a comparison of results and thereby demonstrate the importance of the adjuvant resources.

Let us now, without attempting to go into details, consider some of these aids to gynæcology and their application.

Gymnastic exercises and physical culture, as applied to the development or strengthening of the pelvic organs and related parts, is an important and much neglected means, not only of relieving or remedying existing ills, but, what is of quite as much importance, of preventing them when not yet developed. This will be found to meet the requirements of a large number of cases, especially of school girls and those who, through neglect in this direction, and as a

result of excessive forcing of mental development, have become nervous, hysterical, anæmic, or neurasthenic, and every observing physician, especially in our cities, knows how numerous is this class of cases as a result of the ill-advised cramming and overtaxing of nervous forces which characterizes our educational methods. Imperfect development of the sexual organs is a not uncommon condition in these cases, and properly directed gymnastic exercises, though neither medical nor surgical, are the chief and best remedy. This treatment is also valuable in many cases of uterine displacement, especially prolapsus and retroversion. Regulation of dress as well as of exercise, must receive attention, as neither internal medication nor muscular development can overcome the power for evil of great pressure or superincumbent weight from improper dress, and securing favorable conditions in this direction is an indispensable aid to the cure of many pelvic difficulties.

Closely related to gymnastic exercise is postural treatment, which aids greatly not only in reducing displacements, but also in relieving congestion, and enables us to provide conditions favorable to relief by medication; while without it, the effects of the best selected remedies might, in many instances, be tardy and unsatisfactory.

Carrying the application of mechanical aid a little farther, leads to manual pressure or manipulation, and the next step in the same direction introduces mechanical contrivances or instruments for overcoming and correcting malpositions or deformities which interfere with comfort, nutrition, or function. In case of an acute uterine displacement, mechanical relief must precede medicinal treatment to insure a cure, and in corresponding conditions of a chronic character, the mechanical aids must be longer or more persistently applied. To lift the uterus into its normal position by manual pressure will generally suffice in the former, while in the latter, when a malposition has rendered the natural supports incapable of performing their functions,

mechanical support must be supplied until strength and functional power can be renewed through the administration of the proper remedies. This is simply common sense, and no more inconsistent with homœopathy than is the reduction of a dislocated joint or the use of a splint or bandage to maintain the proper relation of parts elsewhere. It is not necessary or practicable to consider in this connection the merits or demerits of the many different forms of pessaries; but I wish to express my decided preference for the simple, elastic tampon made of antiseptic wool. By adapting its size and position to each case, the requisite support can be secured and without irritation or discomfort. Then, too, it affords the best possible means of applying another aid of great value, namely, glycerine. Through the remarkable osmotic and detergent action of this agent, great relief is given in a short time to tissues overloaded and distended by congestion, especially of the passive form, such as is so commonly associated with and dependent upon uterine displacements, which interfere with or obstruct the free circulation of blood. No physician who has observed its action when thus applied with a tampon to the cervix uteri, can question its efficacy in relieving the congestion which is so often the cause of the distress which is manifested in the subjective symptoms. Now, if it is proper to remove a splinter from the flesh, or pus from an abscess, is it any less rational to give more speedy relief from the painful pressure of impeded circulation by this simple means, which in no possible way interferes with the curative treatment.

Furthermore, while medical treatment is not within my present province, yet, as a question of privilege, I would ask, If the indicated remedy be applied *per vaginam*, is it any more, or any less, homœopathic than if administered *per oris*? I contend that it is not; that the characteristic effects of a drug will be identical whether taken into the stomach, absorbed through the skin or mucous membrane,

or injected sub-cutaneously. It is merely a question of how to get the most speedy, sure, and effective action, and my observation and experience have convinced me that in many conditions of a congestive or inflammatory nature, the best results follow the application of the medicament in the form of a glycerole to the cervix by means of the vaginal tampon.

Another local application of great service in the treatment of gonorrhœal or syphilitic and all ulcerative conditions of the genital organs is Marchand's peroxide of hydrogen. While its power to destroy germs and septic matter with which it comes in contact is unsurpassed by any other germicide or antiseptic, it is perfectly harmless to living tissues. With a swab of cotton saturated with this solution the parts can be more thoroughly cleansed than by any other means with which I am acquainted, thus removing effete, poisonous, or septic matter; and I cannot understand wherein this is any more objectionable than cleansing the skin with soap and water or teeth with a brush.

Until a comparatively recent date, the value of massage, or, more properly speaking, manual treatment in gynæcology, was not known or practiced, and even now it is not applied by gynæcologists generally, or in the thorough and systematic manner which would render it one of the surest and best aids in many conditions. It has, however, been demonstrated beyond question that in the hands of those practiced in the manipulation of the pelvic organs, truly wonderful results may be secured in chronic peri-uterine inflammations, chronic inflammation and displacements of the ovaries, uterine displacements with or without adhesions, hæmatocele and the consequences or sequelæ of pelvic inflammation generally. Resorption of the lymph exudations, loosening of adhesive bands, and restoration of muscular tone, are the objects of this treatment, and by its aid can certainly be much more surely and rapidly accomplished than by medicinal treatment alone. Manual treatment,

then, is just coming to be one of the most effective and reliable aids in gynæcology, and should, it seems to me, be a generally accepted and most welcome one.

Of all our adjuvant resources, probably none is more generally recognized, more universally used and abused, more powerful for good and for ill, or more promising of future development and usefulness than electricity in its various forms. With the results attained by its aid in many and varied conditions, it can no longer be ignored by practical, educated physicians, and we, as well as those of other schools, may and should make it an aid of great value in gynæcological practice. In the treatment of chronic metritis and endometritis, in promoting the resorption of the products of inflammation, in relieving various neurotic conditions, in toning up weakened parts and overcoming chronic dislocations, and perhaps in the treatment of adventitious growths and many other conditions, electricity will give far more certain and speedy effects than can be attained without it.

Without mentioning various other means and measures which are occasionally employed, or those which individuals here and there esteem of value, I present the foregoing as the main resources of gynæcology which may be classed as adjuvants.

It is not intended in this connection to attempt a description in detail of the application, or the benefits to be derived from any of these measures, any one of which would furnish subject matter for a thesis.

If the object of treatment in any case be to prove the effect of a given remedy, or, in other words, the mathematical demonstration of the law of similars, then it will be admitted at once that nothing should be allowed to aid, or in any way complicate its action. On the other hand, if the object be to relieve suffering and cure the patient in the surest and most speedy manner, then the observation and experience of gynæcologists generally is that these adjuvants

are instrumental to that end, and must, therefore, be considered essential aids in the treatment of women's diseases. Mark me, these measures are not offered as superior to or substitutes for the appropriate remedy, but as aids to the more speedy accomplishment of the purpose for which the remedy is given.

Our position, then, is this: Having for our object the cure of our patients, not the proving of drugs, while we believe in the true homœopathic remedy—when it can be found—as the principal means of cure, we also believe in promoting or hastening the result by applying any other means which observation and experience have proved effective to that end, and which does not in any way destroy or vitiate the curative effect of the remedies, and this can with truth be said of every one of the measures herein presented.

Because we will not sacrifice the comfort and more speedy cure of our patients to the demonstration of the power of the unaided remedy to effect an ultimate cure, we maintain is no just cause for charging us with disloyalty to principle. It is not that we love homœopathy less, but our duty to our patients more.

A CASE OF PUERPERAL ECLAMPSIA.

BY

W. J. MARTIN, M. D.

PITTSBURGH, PA.

The prognosis of puerperal eclampsia is always uncertain. Although comparatively a rare occurrence, it is not only one of the most alarming, but also one of the most fatal that attend pregnancy or the puerperal state. It may terminate in complete recovery, the patient having no recollection of what has transpired, or it may give rise to other

diseases, such as puerperal mania, paralysis, idiocy, loss of memory, amaurosis, etc.; or it may terminate in death, either directly during tonic spasm, or, as more frequently happens, during the soporous stage following spasm, through oppression of the brain by congestion or effusion. Fatal hæmorrhage has been known to succeed convulsions, through paralysis of the womb preventing its firm contraction. A favorable termination may be expected when the convulsions become more distant and less severe, when a good degree of consciousness is restored between them, when there seems to be but little cerebral oppression, or, if this has existed, when it is manifestly subsiding. On the contrary, short and imperfect intervals between paroxysms of great severity, deep unconsciousness between the convulsions, stertorous breathing, and other indications pointing to great cerebral oppression, portend a fatal issue. The prognosis will be especially unfavorable if the attack has happened before delivery, and there has been no amelioration as regards the frequency and severity of the paroxysms after that has been accomplished. Such being the nature of this formidable malady, its successful treatment is manifestly a subject of great importance. By placing on record the successful treatment of a case, though possessing no new or original features, I may give aid and comfort to others in the management of cases of a similar character. This is my apology for presenting the following case.

Mrs. H., æt. twenty-seven years, the mother of one child, now about six years old, engaged me to attend her in confinement, which she said would occur January 14, 1891. Her first confinement had been, she said, a severe and slow labor, but otherwise uneventful. During the present pregnancy she has had nothing special to complain of unless it be headache, but she is one of those persons who have much headache at all times, due, in her case, partly to nervous temperament and partly to errors in diet. But I wish especially to remark that at no time during pregnancy was

there any observable derangement of the urinary discharge, or any œdema.

On Sunday morning, January 4, about one o'clock, I was summoned to see her. This was ten days before the expected date of confinement. She was suffering from backache and could not rest ; was rather nervous and had headache in the back of head and in eyeballs. I made an examination *per vaginam* and determined that she was not in labor. R. Cimi.¹ every two hours. When I called again about noon she was up and feeling better, but still complained of headache. I considered her as being somewhat hysterical, and continued cimi. She rested quite well on Sunday night and on Monday morning was feeling better. I left her more cimi. and promised to see her in the evening. I made a visit to a patient in the country in the afternoon, and returning to the city about six o'clock, I left the train so as to stop at her house before going to my home, thinking thus to save myself the trouble of going to see her later in the evening.

I was met at the door by the mother of the patient, who very excitedly told me that her daughter was having spasms, that they had sent several messengers for me, and for me to hurry upstairs. I found the patient in a complete stupor, puffing expiration, unconscious. In a few moments after my entering the room she took another spasm, which was the fifth. The clinched fists, with the thumb on the palm, foaming at mouth, biting of tongue, muscular twitching, etc., left no room for doubt as to the diagnosis. On examination *per vaginam* I was glad to find the parts relaxed and the os soft and patulous, so that I easily inserted the ends of two fingers and found the vertex presenting. There was no doubt in my mind that the course to pursue was to deliver the patient at once. Preparing some gels.² in water I instructed them to give her a teaspoonful every ten minutes, and hurried home for my obstetrical bag, calling on my way for Dr. Z. T. Miller to assist me. Unfortunately Dr.

Miller was not at home, so with no assistance but the husband and nurse (the mother was *hors de combat*), I proceeded to chloroform the patient, who, I should mention, had not had a spasm during my absence of nearly an hour, and, by the way, this was the longest interval between the spasms. When she was completely anæsthetized I succeeded with but very little trouble in dilating the os with my hand sufficiently to admit the passage of the blades of the long forceps, and as the parts were roomy and relaxed the delivery was quite easy. The child was well developed and vigorous.

The woman had no more spasms, but was unconscious till next morning, and not until the following evening was she completely conscious. She complained of headache, and, as before delivery, the pain was most in the occiput and eyeballs; there was also diplopia. Gels. was continued as the remedy, but it was nearly three weeks before she was entirely free from pain in the head.

During this time she also received, as symptoms appeared to require, bell., cimi., and glon. Her recovery was complete, she and the babe enjoying perfect health at the present time.

1712 CARSON STREET.

UTERINE THERAPEUTICS.*

BY

HENRY C. ALDRICH, M. D.,
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To the student in medicine there are few subjects that present greater difficulties than the study of the diseases peculiar to women, particularly so in this country.

Clinical instruction in diseases of women is scarce and

* Read before the Minnesota State Homœopathic Medical Society, May, 1891.

incomplete in America compared with the daily influx of material in the European hospitals.

The result is that the student starts in practice with a most limited knowledge of that great class of diseases which he must encounter daily, if he has any practice whatever.

A wrong diagnosis is the result, treatment which is of no avail is often adopted, the patient continues to suffer, and either finds better advice elsewhere, or her real condition remains undetected, and she continues for the rest of her life a helpless incurable, worn out both in mind and body.

Although gynæcology is still remarkably young, for we can only claim birth for it in the year 1816, when Recamier insisted on the necessity of studying diseases of women as much as possible by ocular demonstration like all other diseases, thus to take it out of the shadowy regions of conjecture.

Then it was that the eyes of the most intelligent men of the profession were opened and they saw the absurdity of working in the dark, as they had done.

From 1816 in France and 1845 in England began the reign of the knife, and many of the more eminent among gynæcologists have entirely lost faith in medicinal treatment, teaching that many of the diseases of women are to be cured only by the knife.

This has, I am very glad to say, obtained only among "our friends the enemy," the allopaths; their motto seeming to be, *Primum operare*.

In Europe the uterus is largely under the dominion of the knife. In consultation with a medical gentleman last summer, I made objection to slitting a cervix as he had suggested; an electric stem pessary was then proposed by him, the utility of which I could not see either; whereupon, the gentleman impatiently asked, "What in the world I

would propose?" as if uterine therapeutics consisted of nothing but cutting or supporting the uterus.

Inasmuch as the gentlemen mentioned was decidedly allopathic in his methods and belief, it did not tend to smooth his ruffled plumage for me to say "that homœopathic physicians had remedies in their pharmacopœia [mentioning several, such as macrotin, caulophyllin, nux moschata, pulsatilla, etc.,] which superseded the use of the knife in very many instances."

The gentleman replied, "Homœopaths *non compos mentis*."

Every one engaged in the daily routine of practice has frequently met with cases of uterine hæmorrhage which troubled him not a little, both as to diagnosis and treatment, causing him much worry and annoyance, and possibly not tending to enhance his reputation in the estimation of his patient and her friends.

Such an one it was my fortune to encounter some time since.

I obtained as clear and concise a history as it was possible to wring from my patient; what I succeeded in educing was meager enough in all truth.

After careful examination I was convinced that the hæmorrhages were due to constitutional and not local conditions; in fact that my patient was subject to the affection known as hæmophilia, and had suffered from these hæmorrhages, more or less severe, for many months subsequent to a premature labor at seven and a half months. The hæmorrhages at times left the uterus and came from the nose, mouth, throat, stomach, intestines, and once from the ear.

Remedies administered in sufficient quantity to slow the heart's action would check and relieve the hæmorrhages temporarily.

Forced feeding would benefit until the stomach rebelled, which it was sure to do in a very short time.

The three remedies, which should, from their pathogenesis, relieve this condition,—iron, phosphorus, and secale cornutum,—seemed each to act beneficially, in all potencies, for a time, but soon lost their effect, and other measures were resorted to for relief. Galvanism gave but temporary relief, the stronger currents producing such intense and long-lasting weariness in back and legs that it was discarded.

In this particular instance, I may say that electricity proved of but slight if any benefit, but the one thing which I wish to emphasize is (Lawson Tait to the contrary notwithstanding), that the time is not far distant when electricity will occupy a much more prominent position in uterine and pelvic therapeutics than it now does.

The patient of whom I have just spoken, I left last summer, on my departure for Europe, in a very slightly improved condition; but on my return in December last, I found her in much the same condition as before.

Now, gentlemen, you may prepare to smile, as you doubtless will, when I tell you of what our English cousins would call my *coup de grace*, for, be it known, if an English physician can possibly squeeze in a Latin or French phrase he prefers it most infinitely to plain, unadulterated English.

Dr. Blake, of London, invited me to see a little patient of his, afflicted with the results of an attack of infantile paralysis. After exhausting everything, known to the powers above and below, in the way of what he called legitimate medicine, he told the child's father that it was a useless waste of money to continue treatment.

The father, like the true American he was, announced his intention of getting to the "bottom of his pile" before he stopped, and believing that the child had improved under the care of Dr. Blake, urged him to continue. The doctor told him that his last resource lay in what he termed "clap trap" (with all the accessories for which "clap trap" he was well provided).

The child was brought to his office and he achieved his maiden effort, with the result that the child of eight years, who had never walked, while hypnotized, at his suggestion put her two hands in his, arose from the lounge, and walked in a faltering, wooden kind of a way half across the room ; and when I saw her some months after this, was able to do the same thing when not hypnotized.

We will undoubtedly hear of this case again, as Dr. Blake is a noted writer.

I must say that what I have seen of, and done with, suggestive therapeutics makes me remark quite emphatically that suggestion will, in the future, find a place in my pharmacopœia.

The lady before mentioned came again under my care. I discarded medicines, electricity, forced feeding, massage, etc., and confined my treatment to the suggestive methods of Bernheim Liegois, with such marked success that the hæmorrhages, which had threatened her life, have entirely ceased, and the patient, thus relieved of the great drain, has rapidly gained flesh and strength.

Allow me to speak of another therapeutic method for a moment, and then I will have ceased tiring you. I refer to the massage of the pelvic organs, based upon the claims and methods of Brandt of Stockholm.

This method of treatment has been and is now being used extensively in the hospitals of Germany and Sweden, and is being taken up to some extent in England and in this country.

It necessitates a thorough knowledge of the anatomy of the pelvis and pelvic organs, and the expenditure of a great deal of time by the physician.

One objection that has been raised to its use is the fact that it almost invariably develops more or less sexual erethism.

As a curative agent its benefits are perhaps more noticeable in the treatment of adhesions, the result of pelvic inflammations, and in cases of prolapsus uteri.

UTERINE INERTIA.

BY

A. A. LOVETT, M. D.,

EATON, O.

Inertia of the uterus is fortunately not frequently met. Nor are there any data whereby we can suspect that we may or will have such a condition to deal with. Uterine forces are independent to such a degree that they seem to be unaffected by the general condition of the patient. Medical literature is very meager on this subject and we find but little treating on the cause and origin of this difficulty.

We will meet partial or complete inertia in a strong, well developed woman, where everything promised the most favorable conditions; and on the other hand, a woman, weak, feeble and emaciated by disease to a point that we fear will entirely incapacitate her for labor, will exhibit the most perfect and powerful contractions of the uterus. Between these two extremes we have the various grades.

The causes of inertia are here difficult to determine, and if found at all, must be discriminated in each individual case. Should a weak and enfeebled woman develop inertia, we should feel justified in pronouncing general debility the cause of the difficulty, and probably we would be correct in this given case. But our next case might be of extreme debility with perfect contractions of the womb.

Prolonged and exhausting labor is a frequent cause, and should always excite the apprehension of attendant and put him on his guard.

No case should, however, be allowed to continue unaided in violent labor until the powers are so far exhausted as to produce this undesirable effect.

Primary and secondary inertia are distinguished in that the former manifests itself during and immediately following

labor, while the latter develops some hours after the placenta is properly delivered and the womb contracted to the satisfaction of the attendant and all promises well; when later the patient either announces that she is flowing freely or gives signs of syncope from excessive loss of blood through concealed hæmorrhage. Primary inertia may manifest itself during labor in insufficient pains or expulsive efforts. When this occurs, however, the attendant can be on his guard. So great may be this insufficiency that manual labor is needed to accomplish delivery. After the third stage of labor the first symptom that attracts attention is more or less profuse hæmorrhage. On examination the womb will be found to be soft and relaxed instead of a hard, round ball in the lower abdominal cavity. The flow in these cases is generally profuse and alarming, and unless promptly stopped will in a few minutes drain the life of patient away. The inertia may be only temporary and readily respond to the means used to correct it, or it may continue for hours, defying the best efforts we may make.

A typical case of primary inertia of the womb was my recent experience. The lady, a bright, active woman of rather delicate form, but of good powers of endurance, always enjoyed good health except occasional attacks of asthma. She had unusually good health during pregnancy and entered labor with the best of prospects. The pains, however, were feeble and far apart, although not enough to excite apprehension; during early labor the os dilated slowly and well, but when the expulsive efforts came they were unable to distend the perineum, and, unaided, to expel the head. I noticed that her voluntary efforts were greater than the uterine contractions, for when she renewed her breathing in the midst of a pain the head would partially recede under the arch. However, by manual assistance the child was born and a short time after the placenta, entire, was expelled in good shape. Immediately on turning to my patient I saw signs of syncope. I placed my hand on

the abdomen and could feel no signs of a womb, and further found a torrent of blood flowing from the vagina. The hæmorrhage was the most frightful I ever witnessed, and I realized that unless it was promptly relieved would soon end the life of my patient. Grasping the womb was impossible, for I could find no womb, so thoroughly was it relaxed; kneading the abdomen produced no effect except to increase the flow. Ipecac was administered internally. Hot water was then called for, and from a fountain syringe it was thrown quite hot into the cavity of the womb, in considerable quantity, as also was pure vinegar. These not producing the desired result I carried a large sponge, saturated with vinegar, into the cavity of the womb and held it there with my right hand and with my left kneaded the abdomen. This procedure had the effect of controlling the hæmorrhage, but failed to produce contractions. For fully one-half hour I stood with my hand in the womb before I felt any contraction and one-half hour longer before there was sufficient contraction to warrant me in withdrawing the sponge. Fluid extract of ergot was given during this time both internally and hypodermically. Hæmorrhage ceased and the womb maintained a firm contraction. A few hours later, however, the womb relaxed and internal hæmorrhage reduced the already weakened patient to syncope from which she did not recover for five or six hours.

The most active measures were necessary to induce sufficient contraction to control the bleeding; ergot with stimulant, ice on abdomen, and kneading the womb were continued until the patient was safe, when she made a slow but good recovery.

Such frightful cases are fortunately very rare. They leave one no time to experiment or speculate, but demand the promptest action. What the potentized remedies may do in such cases I am unable to say. If they control, they are all sufficient, but while life is flowing away so rapidly I

feel the need of active local means and make haste to use them.

I can trust and wait patiently on the internal remedy when the flow is passive and no great quantity of blood is lost, but I think we need more in those cases when the life blood is flowing away in torrents—a few minutes delay then may be fatal.

Kneading the abdomen had no effect in my case that I could detect, nor did any means except the sponge saturated with vinegar, and the ergot given internally and hypodermically.

In this case, as is my usual custom, I had used chloroform during the expulsion of the head, but I do not attribute any of the result to the use of this agency. The only severe hæmorrhage I ever had prior to this case was one in which no anæsthesia had been used, and never since, during my use of chloroform, have I had any similar difficulty. In my opinion it was a case of extreme essential inertia and would have been so under any circumstances.

A PORTION OF RETAINED PLACENTA.

BY

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CALCUTTA, INDIA.

CASE.—Mrs. P., aged twenty, phlegmatic constitution, gave birth to a healthy child at her full term, on the 26th of January, 1889. This was her second delivery ; the first one was two years previous, during which she did not feel any after-pains. But this time she complained of a severe pain after the birth of the child. The pain was almost continuous, but used to increase by paroxysm, which was so severe that she used to go almost mad. She was treated for after-pains and was given *Caulophyllum* and *Gelsemium* respec-

tively without much good. On the third day I was called to see her. I found her in a great distress. She was moaning and wanted to move about in bed, which was prohibited. On inquiry I learned that she passed both urine and stool within usual time after her delivery. The discharge was rather profuse and clotted, but the pain was most severe. She could not properly describe the character of the pain, but she only said it was all over her abdomen, more so on the lower part, and sometimes reflected to the back. I was also under the impression that this was after-pains and gave her Nauthonylum ϕ , six drops in four ounces of water, one spoonful every half hour if the pain remained unabated, and at a longer interval if it was less. After the third dose one big lump, bigger than a fist, came out ; this, on examination, was found to be a *portion of placenta*. After its expulsion the pain subsided completely, the discharge became normal, and she got on all right.

UTERINE DRAINAGE.*

BY

M. H. PARMELEE, M. D.,

TOLEDO, O.

In a paper read before this society two years ago in its session at Cincinnati, during a discussion of the subject of salpingitis, the present writer advanced and advocated the subject of this article.

Now, then, to return to the point at issue. *How* (1), *when* (2), and in what conditions (3) of disease ought uterine drainage to be practiced?

1. Some two years' additional experience have convinced me that the steel dilator, and particularly the pattern of Goodell, is the most practical and certain method of obtain-

* Read before the Ohio State Society.

ing a desirable result. I have discarded entirely both sponge and tupelo tents as being unsurgical, in that they block the exit of secretions for the time being and lead to uncertainty in results. W. Gill Wylie has gone so far as to put upon record that the gynæcologist who is guilty of using tents of any description is at least ten years behind the times. Certain it is, however, that an anæsthetic and a steel dilator will accomplish more in ten minutes than a tent will in twenty-four hours. In the ordinary subject, one inch of dilatation of the outer and inner cervixes by the steel instrument, maintained for five minutes, will provide a sufficient potency to the cervical canal to provide drainage for at least one month. Can such a result be obtained by the use of any other device—by electricity or bougies? In my experience I answer confidently, No!

2. When, and in what conditions?

At any time, menstrual or inter-menstrual, an anæsthetic, as ether or the A. C. E. London mixture, prevents any necessity for the choice of an operating time or any waiting for the subsidence of periodical congestions.

3. What conditions? Let us lay down the one broad principle or rule for guidance. Whenever there is any discharge or hæmorrhage into or upon the surface of the uterine membrane, and the openings do not promptly and freely discharge it or their results, as clots, strings, and mucus, then dilate in order to drain away, and at once. For instance: In acute endo-cervicitis or endo-metritis, whether there may be tenderness over either tubal or ovarian regions, if there may be the least sign of a stinking discharge, dilate in order to drain away, to prevent any extension to the tubes or peritoneum.

In myo-fibromata do likewise, in order to head off so-called attacks of "cellulitis." In dysmenorrhœa, if you provide sufficient exit for secretions, away will fly the pains, which continue to torment so long as their presence remains. In metrorrhagia—in conjunction with the curette

or the swab—drainage is of the first importance. And so on through a long list “of ills that (female) human flesh is heir to,” success, certain and sure, may be quickest obtained by setting up uterine drainage.

In my experience I have found physicians who were afraid, as they put it, “to interfere with nature,” and would resort to such agents as a tampon in hæmorrhage. To such, my simple insistence is, and has been, “there is a better and a safer way!”—a way that never leads to septic infection and death, or long-continued illness, acute or chronic. To empty and to provide continuous drainage is the first, and a long step toward a restoration to normal conditions.

A little device made of bent steel wire has lately been introduced to the profession by a New York instrument-maker. It was intended for introduction through the cervical canal, and to be there left. Such an affair theoretically might be feasible; but practically one arm broke, of the only one I have ever used upon introduction to a cervix, and refused to remain open. And, worse of all, in withdrawing it, the broken arm so lacerated the canal of my patient as to add materially to her sufferings. Hoping that this fragmentary description may aid you in some emergency, has led me to speak so frankly and to the point. Don't overlook uterine drainage.

OPEN FALLOPIAN TUBES.

BY

W. A. FORSTER, M. D.,
KANSAS CITY, MO.

Some two years ago, a married woman, about twenty-seven years of age, came to me for treatment for some uterine disease. I shall not go into detail about the symp-

toms, but merely give a brief history of the case. She was rather on the robust order, and had always enjoyed excellent health, until within a few months previous to the time mentioned, since which time she was troubled a good deal with bearing down pains and backache. She had given birth to four children, the youngest of which was two years old. First and second labors—seven and five years previous, respectively—had been very difficult and protracted.

Upon digital examination found uterus very much congested, extensive bilateral laceration of cervix, and laceration of perineum.

A large sound was easily introduced into uterine cavity, which measured nearly four inches. While sounding the uterus to determine the condition of its interior, I exerted slight pressure upon the sound, when suddenly I felt it slipping through, what I supposed, the uterine walls; at any rate it passed in clear up to the handle (the sound was ten inches long from point to handle). By feeling through the rectum and abdominal walls (bimanual manipulation) I could outline the uterus without any difficulty, and I, of course, feared the result of having penetrated the uterine walls. No untoward results following, I later on repaired the lacerations, administered the indicated remedies, and patient got well. Was not able to push sound through uterine walls three months later, when I tried to do so, and I was left in wonder and amazement.

Next case was one I was called to operate upon for lacerated cervix. The physician in charge had made a very careful examination, introduced a sound to determine the depth of uterus, which he found about normal, and, placing implicit confidence in his diagnosis, I did not go through the regular prescribed formula of a lengthy inquiry and investigation, but proceeded at once to the operation. By digital examination I soon detected a wide gap in the shape of a bilateral laceration; the sound disclosed the fact that the uterine cavity was about normal in depth, but on mov-

ing it around a little, and exerting slight pressure upon it, as in the preceding case, it passed through the uterine walls (?). I paused and inquired if the woman was pregnant, to which I received a negative reply. Bimanual manipulation revealed the fact that the uterus was nearly normal in size, and I again introduced the sound, which went in up to the hilt. By introducing two fingers into the rectum, and the other hand over the abdomen, I could easily outline the uterus, and feel the sound as it passed through the uterus. The point of the sound could be felt through the abdominal walls even as high up as the umbilicus. Now I knew I had penetrated the uterine walls, but as I had been sent for to operate, and realizing that I could make the condition no worse by doing so, I operated, but was anxious to make an investigation right then and there, to see where the sound went.

But in this, as in the preceding case, everything progressed to a complete recovery, without any unpleasant symptoms. The hole in the uterus was entirely closed up a few months later.

The next two cases were so near like the preceding that I do not deem it necessary to describe them in full, but merely state that there was chronic subinvolution, and both progressed very nicely to perfect recovery.

As a natural result, I commenced to speculate about what was the real condition of affairs, and after the most careful investigation and examination of the cases, I came to the conclusion that there was sub-involution of the fallopian tubes as well as of the uterus, and that the sound had passed into them instead of rupturing the uterine walls. I reported the cases at different medical societies, but could get no light on the subject. Several doctors had heard of cases where the uterine walls had been perforated, but it was impossible to introduce a sound into the fallopian tubes, as they are, according to anatomists, described as follows: "Its canal is exceedingly minute, and commences at the superior angle

of the uterus by a minute orifice, the ostium internum, which will hardly admit a fine bristle."

Notwithstanding all this, I was firm in the opinion that the sound went through the tubes from all the circumstances connected with the cases. After looking through all the literature I could find on the subject, without any benefit, I at last found in the 1890 issue of the "Annual of the Universal Medical Sciences," an article by Wallace, wherein he describes this condition, and inclines to the belief that patency of the tubes is a normal post-partum condition, due to subinvolution of these ducts, and referable to the same cause as subinvolution of the uterus.

My friend Dr. Geo. A. Dean just reported a case to me that came under his observation several years ago, in which he diagnosed abscess of the ovary or fallopian tube. Having no instruments with him except a pocket case (the patient lived out in the country), he took a male silver catheter, and with it sounded the uterus, and as he was pushing it around it suddenly slipped in up to the handle, and about a gill of pus was discharged through it. He undoubtedly catheterized the fallopian tube.

HYDATIDIFORM MOLES OF THE UTERUS, WITH AN ILLUSTRATIVE CASE.*

BY

J. MURRAY MOORE, M. D., M. R. C. S.

As these curious perversions of embryonic structures are not so very common in ordinary practice as to be unworthy of note, I thought the following case and pathological specimen worth bringing before our society, as a basis for some remarks on the nature of such formations.

* Read before the Liverpool Homœopathic Medical Society, May 7, 1891.

On June 12, 1890, I was consulted by Mrs. C., a married lady, aged twenty-five, of spare frame, of nervo-bilious temperament and active habits, and a tolerably healthy general appearance, for an enlargement of the abdomen, accompanied with a suppression of the menses which could not be accounted for by the symptoms of an ordinary pregnancy.

Her story, gathered at several interviews, for she was not used to doctor's interrogations, was as follows: She had been married in the first week of August, 1889. Previously for some years she had been a school teacher, rather overworked, and had contracted hæmorrhoids from the long hours of standing required by her duties, and too frequent inattention to the calls of nature. These piles had for more than two years bled at intervals, and since the beginning of these hæmorrhages the menses, though regular, had been more scanty than before that, and attended with more pain during the first two days. Constipation she had been accustomed to relieve with rhubarb pills. With these exceptions her health had been so satisfactory that up to the date of her marriage she had never thought it necessary to consult a doctor.

Mrs. C.'s mother is alive and well; her sisters, all living, are free from scrofulous or tuberculous manifestations.

About one month after her marriage, namely, in September, 1889, the menses appeared, lasting two days, and had not returned up to the date of her first visit to me, June 12, 1890. A few days after the September menstruation signs of pregnancy began to be noticed; morning sickness, gradual enlargement of the mammæ and mammillæ, elevation and enlargement of the uterus, and so on, continuing until the end of November, 1889, when, without any shock to the system, or perceptible disturbance of her general health, these symptoms ceased to progress; the mammæ became gradually smaller, and the abdomen enlarged no further. Her mother and a matronly friend who had watched her

with anxiety, expected a miscarriage to occur, but with the exception of a slight occasional watery leucorrhœa, no discharge from the uterus took place. She would not call in a medical man, but at length, in May, 1890, about eight months after the commencement of her pregnancy, she heard of my return to Liverpool, from an old patient of mine, and called upon me, June 12, when I made the following observations.

There is no disease of skin, lungs, liver, kidneys, spleen, or ovaries. There is a functional, probably anæmic, murmur with the cardiac systole. Both external and internal hæmorrhoids exist. Vaginal and bimanual examinations reveal the fact that the uterus is enlarged to the size of a gravid uterus at the end of the third month. There is a doughy and inelastic feel about the cervix and lower third of the uterine parietes, and a small abrasion of the os uteri, from which there is a slight muco-purulent leucorrhœa, but there is no discharge from the cervix. It is plain to palpation that the whole cavity of the womb is filled up by some solid or semi-solid tumor, the nature of which cannot be pronounced with certainty while the os uteri is closed, as at present. No foetal heart sounds nor placental bruit can be heard.

The skin is paler than is usual with Mrs. C. in health; in fact, there is external evidence that her blood is somewhat hydræmic, doubtless from the frequent loss of blood at stool.

The plan of treatment I now laid down for her was:

1. To heal the abrasion of the os.
2. To dilate the os and cervix.
3. To excite the expulsive action of the uterus.
4. To reduce the hæmorrhoids and strengthen the general constitution.

The treatment was begun on June 25 by the application of hydrastis lotion to the os uteri on a sponge. The saccharin carbonate of iron was given as medicinal food once a

day, and caulophyllum ϕ was prescribed as the utero-ovarian remedy most indicated. By the 19th of July the abrasion of the os was quite healed. On the 22d July I was urgently summoned to her home in Egremont, and found her in the midst of what resembled a miscarriage—the os partially opened, clots and blood in gushes of small amount coming away, and severe contractive pains, with bearing-down. I should mention that on July 16 I had very gently introduced a flexible Jennison's sound through the cervix into the os internum, allowing it to remain there for five minutes. On the afternoon of the 19th July she had gone to a picnic and danced. This combination of circumstances brought on the uterine expulsive efforts of the 22d and 23d July, to the great satisfaction of all parties interested; for early on the morning of the 23d July, the tumor came away, clean and clear and unbroken, which had been so long retained; namely, for a period of *eight months* from the cessation of *visible* growth. Mrs. C. made a rapid recovery from this illness, and when able to come over to Liverpool came under treatment for the hæmorrhoids. She gained in weight, in flesh, in color of skin, and in general health. The catamenia continued regular from August 21, becoming normal as to quantity, until October 25. Definite signs of pregnancy appeared about the end of November of last year, and she has now (May 7) reached the 23d week of her second pregnancy without a morbid symptom, and with considerable improvement to her general health.

This tumor, which I now pass round, when first passed, resembled exactly a cast of the inside of a gravid uterus at the tenth or twelfth week.

Its weight was 5 ounces, and it measured $6\frac{1}{2}$ inches in length by $5\frac{1}{2}$ inches in circumference, tapering down to 2 inches at the lower (the narrower) end.

Its color was dark-red originally, now made rather paler by the transudation of blood into the surrounding preservative medium, which is pure glycerin; but its form and size

are practically unaltered. Shortly after this mole came away, I made a vertical incision through its whole length, and found no trace of embryo, or an embryonic cavity, but confirmed the diagnosis of Dr. Hawkes that it was a hydatidiform mole, by revealing the peculiar cysts, graphically described by Gooch as "like white currants floating in red currant juice." There is a firm hæmatoma inside the narrow end of the mole. Externally, the surface of the mole is reticulated, but displays no roots, tendrils, or processes. This has been a most fortunate feature for the patient's safe delivery, for sometimes the chorionic villi, thus transformed, as I shall shortly explain, burrow into the walls of the uterus, and cause serious hæmorrhage and even septicæmia, after the surgeon has been obliged to scrape the mole, piecemeal, out of the uterus. If any portion of a "true" mole, such as this is, be left behind in the uterus, it may be the nucleus of the formation of a "false" mole.

In searching gynæcological literature for an explanation of these formations, I find that nearly all writers agree that the "true" uterine vesicular or hydatid-like mole consists of a degeneration of the villi of the chorion, accompanied by the death, decay, and absorption of the embryo. The characteristic contents of this kind of mole consist of numerous pedunculated grape or currant-like cysts, separated from each other by semi-fluid, or by coagulated blood, but held together at the basis of their stalks by a fibrous network resembling that of the normal placenta.

True hydatids of the uterus are rare, but may occur. Originating in the liver, they may burst into the abdomen, and penetrate through the uterine walls into its cavity, or into the vagina. The hydatid is a closed sac, containing one or two more sacs inside, and the microscope reveals the "hooklets" of the echinococcus in each of them. Of such a nature was the case of the Maori widow (quoted in my paper of last session on "Clinical Experiences in New Zealand), from whom I removed *per vaginam* in September,

1881, a long coil of these parasitic cysts, the nature of which had been mistaken by a previous medical attendant for "cancer." Mrs. W. made a rapid and complete recovery, and for seven years afterward (when I quitted the colony), to my certain knowledge, had no recurrence of them. Hydatids of liver, lungs, and stomach are not infrequent among the Maoris, but among the settlers they are much rarer than among the Australian colonists.

The morbid process of degeneration of the ovum, which forms the true vesicular mole, commences, Spiegelberg states, in an abundant proliferation of the villi of the chorion-sac, followed by hypertrophy of the internal mucoid matrix of each individual villus, the cells and nuclei of its epithelium increasing *pari passu* with the intercellular fluid produced by the breaking down and liquefaction of many cells—a process which swells out many of the villi into bladders resembling currants or grapes.

The fluid in these cysts has been analyzed by Gscheidlen, who finds in it albumen, mucin, phosphates, and other inorganic salts; leucin and tyrosin in small quantities; but no trace of fibrinogenous substances, of paralbumen, or of sugar. By this negative feature the molar cystic fluid is distinguished from the composition of the amniotic fluid, which otherwise resembles it. Usually the patient has an oozing of watery, serous fluid from the vagina during the period of retention of the mole, but Mrs. C. had no symptom like this, and it was plain from the appearance of the mole, when passed, that none of the cysts had burst. This mole is of small size compared to some which have attained the weight of three pounds, and the size of a foetal head at full term of delivery.

In the case of twin pregnancy, it is interesting to note that one of the impregnated human ova may undergo this cystic degeneration, while the other may proceed to full development. It is stated that the celebrated anatomist Béclard was the living child of an event of this kind. No

case is on record of complete absorption and disappearance of a mole within the uterus; it must be passed through the os uteri, or brought away in the mode least likely to injure the tissues, or exhaust the patient. In this instance the compact nature of the mole (comparatively), and the normal state of the contractile fibrilla of the uterus, rendered its expulsion easy.

The point as yet unsettled in the pathology of these moles is whether the degeneration of the chorionic villi is *initiated* by the death and decay of the embryo, or is caused by a morbid state of the blood supplied to the uterine decidua, which involves the *subsequent* destruction of the foetus. Leishman states that the period within which the degeneration of the chorionic villi may originate, does not extend, probably, beyond the tenth week of embryonic life—that being the most active period in the growth and multiplication of these villi. Later on, when blood-vessels have occupied the bulk of the villi, this kind of degeneration seems incapable of formation—although at any period of intra-uterine life the foetus may perish, and various degenerations of a part, or of the whole, of the uterine contents may occur. If, for instance, the molar degeneration sets in after the placenta has fully formed, the foetal cavity remains distinct in the tumor. In this case there was no trace of either foetus or foetal cavity. It is, therefore, probable that the molar degeneration began in this case about the tenth or eleventh week of embryonic life, as the arrest of development was noticeable from external appearances at the end of November, 1889.

The actual pathological cause, or causes, of these molar transformations have not yet been ascertained. If, as Spiegelberg maintains, the seat of the *earliest* morbid change is in the allantois, which forms the primitive channel of nutrition between the embryo and the mother, we must ascribe the cause to some dyscrasia in the maternal system, such as syphilis, scrofula, or anæmia. A woman who for

years had suffered from membranous dysmenorrhœa might be liable to molar developments of this kind. Again, there may be such a chronically morbid state of the menstrual discharge as to cause in all the ova liberated at the period a liability to organic decay. After impregnation, in fact, the sperm-cell (spermatozoon) may be healthy, while the germ-cell (ovum) is unhealthy, though responsive to the vital stimulus of the former. As Mr. C., the husband of my patient, is a perfectly healthy man, I believe that it is in Mrs. C.'s health, previous to her marriage, that the cause must be sought. For more than two years before I saw her, her blood had been in a hydræmic condition, and the menses had been defective in quantity and in color. Mental overwork had also been added to bodily fatigue, and insufficient appetite for food during her teaching years. It seems to me that there was scarcely enough *vis vitæ* in her first embryo to bring it on to complete development.

But a happier fate, I trust, is in store for the expectant mother, who now (May 7) has reached her twenty-third week of pregnancy, as I have stated. As there is a strong tendency for molar abortions of various kinds to recur successively in the same person, it is our duty, I conceive, as scientific homœopathic practitioners, to endeavor to prevent such recurrences in a patient who has once suffered, by constitutional antipsoric treatment during her next pregnancy, very much on the lines indicated by my friend, Dr. Burnett, in his "Prevention of Defect, Deformity, and Disease," etc. If, and when, we are informed that our patient is pregnant, it is our duty to request her to consult us once a month (or oftener, as need may rise) so as to report her exact state of health and the effect of such constitutional remedies as we think fit to prescribe.

My chief object in recording and commenting upon this case has been to indicate to my colleagues of this society the possibility of so managing the treatment of a subsequent pregnancy as to tide the fœtus safely over the dangerous

period of its first three months of intra-uterine life, and prevent the recurrence of a vesicular mole.

THE PROPER LIMITATIONS OF SURGICAL GYNÆCOLOGY.*

BY

PROF. R. LUDLAM.

PART I.

In the following paper it is proposed first to discuss this important subject under a few general heads and afterward to be more specific.

1. *There is no better criterion of medical progress than the recognition of the fact that for the great variety of diseases to which humanity is subject there should be a corresponding variety of resources for their amelioration and cure.*

In this proposition we do not contend that for each separate disease there should be a given specific or expedient that will be suited to its treatment and successful under all conditions. The idea is that, as a rule, those who have known the least of disease, its causes, complications, peculiarities, and clinical history, have always been most easily satisfied with treating it by single unvarying and empirical methods. The history of our art abounds in fads and fallacies that illustrate this proposition, and our own professional observation confirms it.

2. *That, as these various forms of disease cannot all be referred to one common cause, nor grouped in a single series, so the methods of treating them should vary according to circumstances.*

Clinical experience, which includes clinical reading and

* Written for the International Congress of Homœopathic Physicians, 1891.

observation, and the individual judgment of the practitioner, which is based upon a knowledge of the medical sciences, including the *materia medica*, are the safeguard of the patient, and no routine or stereotyped plan of treatment, whether it be medical, surgical, or miscellaneous, will compensate for the lack of an adequate and careful adaptation of the curative means in each particular case, or class of cases, and under all possible conditions.

3. *In medical, as in other matters, there is increased safety and success in a wise and skillful adjustment of special means to special ends.*

While the multiplication of specialties in medicine and surgery is indicative of advancement, and, generally speaking, is so regarded by the profession and the public, it is not, however, an unmixed good, for in many cases the wholesome results that would naturally spring from it, as from other forms of skilled labor, are more than counter-balanced by the mischievous effect of a want of proper training, of principle, and of downright good sense in its application.

In none of the branches have the good and the bad effects of special training been more pronounced than in surgical gynecology. It is impossible to estimate the wholesome influence of its development, not only upon the proper treatment of many of the diseases of women, but also upon surgery in general, and upon the surgery of the bodily cavities especially. Nothing in the history of our art has been more wide-reaching and beneficial, or a greater blessing to mankind; and nothing that has ever come of medical study and application to the cure of human ills is more promising for the future.

But, as always happens, its power for mischief is commensurate with its capacity for good. The more useful it is when properly applied to suitable cases, the more harmful it becomes when these conditions are reversed. So that we have to consider both sides of the question, and not conclude, with the enthusiastic operator, that its resources are

universally applicable and always sufficient; neither, with the strictly medical partisan, that our patients would be as well or even better off without them.

There is a singular sort of infatuation about the practice of medicine and surgery that is misleading, and very much in the way of a proper appraisal of our clinical outfit and output. It constitutes a kind of bias that is extremely obstinate and hard to overcome. Questions that should, and might otherwise, be settled calmly, and on the basis of a sound clinical experience, are often discussed with such feeling as to disengage a great deal of heat, and to do very little good. And we are prone to forget that the extreme views which are engendered in this way cannot be justified in theory or in practice.

Apart from the prejudice of the physician against the gynæcological surgeon, which is only a new phase of an old feud, the fact that this specialty is a comparatively modern one, and that until quite recently its lessons have been chiefly taught by the old school, should not be forgotten in this connection. For, under the circumstances,—which were peculiar, and which will not last forever,—the pupil was given to understand that medical means were of little or no account in comparison with those which were manual and operative, and nothing could be more natural than for him to undervalue or to ignore them. In this manner not a few of our specialists, including those who treat the diseases of the eye and the ear, the nose and the throat, for example, have drifted away from the old therapeutical moorings, to which the best of them, however, are beginning to return.

Some of our good friends are very much opposed to specialists of all kinds because these cross-bred fellows have shown such a dislike, or rather perhaps such a disregard, of our remedies. For in many cases, particularly in the early history of these special studies, they have been substituted by the harsher means and topical applications

of the dominant school, or slurred as having only a fanciful value. But this condition of development is a self-limited affair. It will not be long before the throat and nose specialist will either modify or quit using his heroic means and his too harsh applications to the diseased parts, just as the safe and experienced gynæcologist has done before him. When that period arrives he will have a better idea of what can be accomplished by general, or therapeutic, means, and what will require the use of strictly surgical methods. If he has already adopted the use of the curette, he may also learn from the gynæcologist that escharotics and stimulating lotions can very often be dispensed with.

One of the drawbacks in placing a proper limit to gynæcological surgery, as distinguished from gynæcological therapeutics, is referable to the habit of many young physicians, and students even, deciding to devote themselves to this branch before they have had a thorough training, or any experience in general practice. As fractional doctors, who are fascinated with the surgical portion of the work, they neglect the study of the *materia medica* and of its proper application to the cure of the sick, and seldom make up the deficiency in after life. And, naturally enough, their views of theory and practice within this orbit are narrow and one-sided. It is quite impossible that such practitioners could have a correct idea of the subject in question, or give the best advice to a woman in need of treatment.

A wise and skillful adjustment of special means to special ends implies that we know how to balance our surgical with our medical resources in such a way as to give the patient the benefit of either, or of both of them, as occasion may require. De Quincey defined the right of private judgment as "the right to talk nonsense if you like." Whoever has read our medical journals, or kept pace with the current talk among physicians concerning the relative merits of medicine and surgery in the treatment of the diseases of women, will concede that this right of private judgment has been pretty

freely exercised. But it cannot be doubted that those who have known the least about the question in a practical way have usually been the most voluble and vociferous. We therefore submit that it is about time the claim that internal remedies alone are capable of curing every disease with which this class of patients is afflicted, "if only they are properly chosen," should be so qualified as to accord with the results of a reliable clinical experience. And, by the same token, the extraordinary assumption that, because the knife and the needle, with their modern safeguards, have accomplished such wonderful results, it is quite enough to know how to use them properly and skillfully, is as far from being warranted by all the facts in the case.

In nothing is the physician more useful than in his ability to forecast the course and the inevitable outcome of serious diseases of any kind. The great merit of preventive medicine rests upon the ability of those who practice it to anticipate and to avert disaster from this source. Knowing and realizing what will surely follow if the case is let alone, or trifled with; confident that, after a sufficient time has elapsed and a proper trial has been made of the milder measures, surgical help will sometimes be demanded; and satisfied that, when it is, or will inevitably be required before a cure can be effected, the earlier such recourse is had the better the result, it is most conservative and commendable in every way to act promptly.

(To be continued.)

—According to *The Pharmacology of the Newer Materia Medica*, of April and May, 1891, *Magosteen* (*Garcinia Mangostana*) lessens catamenial pain, cures leucorrhœal discharge, diminishes profuse menstrual evacuation, and corrects disorders in general. It has also been successfully employed in uterine inflammation as a local application. As a gynæcological remedy it plays an important part in eclectic materia medica.

IS ASEPTIC OR ANTISEPTIC TREATMENT
CALLED FOR IN OBSTETRICAL PRACTICE,
WHEN UNDER THE CARE OF HOMŒOPATHIC
PHYSICIANS?*

BY

J. NICHOLAS MITCHELL, M.D.,

PHILADELPHIA.

The tendency of the medical world to accept new ideas and new theories, and to let them run riot for a while, was never before seen to such a wonderful degree as at the present time.

On all sides we see the profession like the Athenians of old "who spent their time in nothing else but either to tell or hear of some new thing"; yet it is a source of surprise as well as mortification, to a conservative mind, to witness how many of these "new things" are finally consigned to oblivion after having been rashly accepted, widely advertised, extensively used, and frequently most fearfully abused.

This fact makes it important for a conservative school like ours to investigate carefully for ourselves, those things which appeal to our reason, not trusting to the dictum of any man or set of men; and to do this without prejudice—uninfluenced by anything but reason. Not allowing prejudice to affect our judgment, because at first sight the subject for consideration may seem not to be consonant with prejudged opinions of homœopathy; uninfluenced by the demands of fashion or of our patients, who unfortunately nowadays are so freely and unwisely instructed in a quasi knowledge of the different "new things," because it is a function of the true doctor, to be a teacher of, not a learner from, his patients, and finally not allowing our judgments to be biased by the shibboleth of "science," because it is not truly scientific to accept any new facts without a

* Read before the Homœopathic Congress.

careful investigation as to their truth or falsity; and most unfortunately, in too many cases where science has been invoked in aid of the investigation of the truth or falsity of new ideas and propositions, it has proved to be only science falsely so-called.

It is then in this unprejudiced spirit that I invite you to a consideration of the question before us, since if it is true that we should answer it in the affirmative, we may do so with judgment and incorporate it in our teachings and practice, while on the other hand if it calls for a negative answer we may have some good reasons to offer why we refuse to accept it.

To the student of the history of obstetrics it is very interesting to note what a change of opinion has taken place in the past fifty years on this subject; and I hold to the opinion that this change being the result of investigation by experiment and trial, presents a strong argument in favor of the antiseptic treatment.

In 1843, when Dr. Holmes wrote his essay on "Puerperal Fever as a Private Pestilence," his views met with but scanty acknowledgment or indorsement, while now authors of eminence quote this essay as classical and speak of it as though the future would remember it as the author's work most deserving of posthumous fame.

When Seurmélivers, in 1847 and 1860, annunciated it as his belief that puerperal fevers were caused by some infection, carried into the patient's system from the hands or instruments of those attending her, he was ridiculed and his belief contemptuously set aside by the then accepted authorities, notwithstanding that he had experimented in the wards under his care, while in many cases he was abused and his views controverted by rhetoric and prejudice only.

Said Professor Hodge, of the University of Pennsylvania, when summing up the result of his cogitations on this subject: "The result of the whole discussion will, I trust, serve not only to exalt your views of the value and dignity of our

profession, but to divest your minds of the overpowering dread that you can ever become, especially in women under the extremely interesting circumstances of gestation and parturition, the ministers of evil—that you can ever convey in any possible manner a horrible virus, so destructive in its effects and so mysterious in its operation as that attributed to puerperal fever.”

At this same time Prof. Chas. D. Meigs wrote to his students of the Jefferson College :

“I prefer to attribute them [the causes of puerperal fever] to accident or Providence, of which I can form a conception, rather than to a contagion of which I cannot form any clear idea, at least as to this particular malady.”

And now the successors of these two gentlemen teach the truth of the danger of infection and advise the practice of asepsis and of antisepsis as a method of combating these risks. Why is this?

In the space of time allotted to me, I cannot enter into the question of the modern idea of the origin of puerperal fever, nor before such a body of men do I suppose it necessary, for I assume that all of us are willing to grant the truth of certain statements.

I take it for granted that all will admit that we cannot ignore the discoveries of certain experimenters like Koch and Pasteur, who have demonstrated the existence of germs solely and truly septic in their character, and whose effects are identical when they act upon living bodies, provided they meet with conditions favorable to their development.

Furthermore, I presume that all who have studied this subject are willing to acknowledge the truth of the statement of observers who tell us that invariably germs are formed in diseased structures of the patients suffering from puerperal fever, and that these are not post-mortem results, but exist and have been found in the various discharges and structures during life. Furthermore, it must be conceded that the injection into the structures of a living animal of

germ-cultures from the discharge of a patient suffering from puerperal fever, will produce disease varying in intensity according to the location and strength of the material injected, with propagation of the germs injected.

I presume also that all will acknowledge that puerperal fever is contagious and that if puerpera are brought into contact with certain other diseases like erysipelas, etc., that they may become infected with puerperal fever.

It must, I suppose, be granted also by all that septic poisons are capable of producing the lesions associated with puerperal fever, as few connected with the out-departments of a hospital but have seen cases of puerperal fever resulting from portions of retained placenta or from uncleanness and filth.

And, finally, I wish to recall the well-known fact that the most infectious discharges are not always those which are the most offensive in smell, and that, in fact, the bacterium termo and the bacterium commune—to which the foetidity of matters undergoing putrefaction is due—are in themselves harmless. As this is a matter of importance for those to remember who relate cases to show the efficacy of some particular treatment and dwell upon the foetid discharges as evidence of the severity of their cases.

Another interesting fact to remember is that bacteria are often, if not always, discoverable in the lochia after the third to the fifth day. I wish to lay some emphasis on this last proposition, since I shall refer to it again in argument as to treatment.

Now setting aside the exploded theories as to suppression of the lochia or milk causing puerperal fever, and recognizing these suppressions to be merely occasional and by no means invariable symptoms accompanying this fever, and also the idea of there being any peculiar fever characteristic of the puerperal period, but recognizing the fact that this fever has various symptoms according to the location of infection—that is, that it may be a metritis, a peritonitis, a

metro-peritonitis or a phlebitis, and recognizing that it is an infectious disease with epidemics occurring when many puerpera are in close communion as in hospitals, one cannot but confess that in some way the puerperal patient must be peculiarly liable to absorption into her system of some septic matter; and when one realizes the bruised and wounded condition of the genitals, the lacerations of the vagina, the perineum, and the cervix uteri, and considers the manipulations of these parts by both physician and nurse, it is not presuming much to look upon them as the most frequent places for invasion of the septic germs from without. I say advisedly most frequent and not the only place for invasion, because a certain number may become infected from their own lochia and a certain other number seem to absorb the septic infection through other channels, as is seen in hospital cases where patients awaiting confinement have, while acting as nurses, become sick with a fever antedating their confinement, and because, also, I believe that sore nipples and resulting mammary inflammations and abscesses are not infrequently results of septic infection.

If, after accepting the truth of the above statements, authoritative statistics can be furnished which will go to prove that not only a great reduction in mortality has been brought about, by aseptic and antiseptic treatment, but that septic fever has become almost an unknown disease in quarters where once it abounded, then I think this method of treatment has established itself on such firm scientific grounds that homœopathic physicians as well as others must make use of it—and that my question must be answered in the affirmative.

I will not burden you with many statistics in this paper, since all who investigate for themselves can find them.

In the Hôpital Lariboisière, the mortality before the introduction of antiseptics, and while the hospital was as yet new, was 10 per cent; this mortality was reduced under the new practice in 1877 to 1 to 145, and in 1878 to 1 to 199.

Garrigues has furnished one of the most remarkable examples of the efficacy of this treatment in Bellevue Hospital. From 1875 to 1882, the death-rate averaged a little over 4 per cent. In 1883, of 345 women confined, 30 died. At this time Dr. Garrigues introduced a series of reforms of the most exaggerated kind of aseptic and antiseptic character, some of which were ridiculed; but in the following 162 confinements there were no deaths, and in the following year out of 409 patients only 3 died from septic causes.

These figures, which could be increased in great number by giving the statistics of the hospitals of the world, speak for themselves, and when we read that 1000 women were confined in the Sloane Maternity Hospital, with but a single death from septic causes, can a candid man refuse to accept the statement that whereas once hospitals were the hot-beds of puerperal fever, now they are looked upon as safer than the homes of the majority, even of the rich.

And now, finally, what argument has homœopathy to offer why this question should be answered in the negative?

In a conversation that I had with Dr. A. Lippe on this subject he made the following argument: Why is it that all women are not infected with puerperal fever? All are surrounded (supposing cleanliness is carefully carried out in all cases) with the same dangers; suppose, if you please, that I accept your statement that septic germs do exist in the lochia, then why is it that one woman becomes infected and another does not? Why do not all become infected? Because, if a woman is in a perfect state of health, her system will throw off these septic germs; they will find no environment favorable to their growth. Watch over your patient through the pregnant state, advise her how to live hygienically, give her proper food to eat, and meet at that time all symptoms that are abnormal with the carefully selected homœopathic remedy and you will bring her to her bed of confinement in such a state of health that she will

have no puerperal fever; her system will throw off these germs.

This is a powerful argument—one that I admit is unanswerable so far as it applies to those few cases of auto-infection from the woman's own lochia, but I do not think that it applies to infection in other ways. And even as regards auto-infection, where the woman only comes under the attending physician's care a few days before labor, or even, perhaps, when in labor, as occurs frequently in hospital practice and occasionally in private, what chance has he had to prepare her system by the careful study of her symptoms during pregnancy?

Is it not carrying out the theory of the homœopathic method to an unwarranted extent to expect the remedy so applied to act as a prophylactic agent?

I can imagine the possibility, perhaps, in a condition where the symptoms of some disease were invariably repeated in every case of the same, but when the particular spot of invasion and the symptoms are so uncertain and so variable as in puerperal fever, I cannot see that we can logically prescribe on the law of similars.

One great argument against prophylaxis by homœopathic treatment is that something must exist, some morbidic symptoms must show themselves; in other words, disease must occur before the homœopathic physician can prescribe under the law of similars.

As the subject under discussion is to prevent disease, not to treat it, I repeat again if the antiseptic or aseptic method can show such good results, then I think that it should be indorsed by the homœopathic school as a thing not inconsistent with our beliefs and not belonging to therapeutics.

If the treatment of puerperal fever, with its many symptoms and complications, were the subject under consideration, then would I most emphatically state my belief in the homœopathic method, but my argument refers entirely to its prevention.

GALVANISM IN GYNÆCOLOGY.*

BY

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CHICAGO.

My report will concern the use of galvanism in the treatment of some diseases peculiar to women. To your mind there may be some reason why I should not bring up this line of treatment, since it is my first report to this society, and the title calls for a medical subject. The point is just here: the class of cases that I shall call your attention to are the very ones that came to me because of the resources that a specialist is expected to have at his command.

They were referred to me by different practitioners, each one of whom had seemingly exhausted his resources with medicines, or else had some notion as to what the curative agent might be and did not choose personally to follow up that line of treatment.

It would be quite impossible to visit the university cities of Europe and not come back fired with some of the intellectual enthusiasm that is gained by contact with professors and students in these medical centers, and the information gathered finds confirmation in my own cases to that extent, that I feel that my report is but another witness for galvanism. Four years ago I attended for several weeks the celebrated clinic of Dr. Apostoli, in Paris. I have for three years practiced the use of galvanism as taught by this enthusiastic worker and remarkably clever observer. This summer it has again been my privilege to attend his clinic. The clinic and surroundings are much the same now as four years ago, save that there is a much larger number of patients, and I judge a larger variety of cases receiving treatments. The world knows of this teacher and his work with fibroid tumors of the uterus; it will also know some day of the wider range of diseases that are to come over to

* Condensed from the *Clinique*.

this treatment for their cure. I hope in this paper to keep to the clinical idea of my report, but in the decade of history of this society the question of galvanism in gynæcological work has not been discussed, and I am almost tempted to provoke one this evening. I once heard a public speaker say that, "It is much easier to be critic than architect." We all know how hard it is for the medical mind to forgive an error, or I was going to say to forget one, especially if it is on some other fellow! We all know how easy it is to travel familiar streets. We are only human if we perpetuate a prejudice, but I think there may be such a fact as cultivating a deeper one. It seems to me also that medical minds are often biased by an ignorance of a subject rather than by the information that is obtainable concerning it. In medicine sometimes a suspicion precedes and is the cause of a declaration, quite as easily as it is supposed to follow in a sewing circle. Denunciation does not decide a fact any more than a bet does. The fact either exists or it does not. I am enthusiastic over galvanism for what it has done in my practice. I must not speak for others, as I am not delegated to do so, but my prejudice against this medical agent has gone; in its place respect for and confidence in it have come to stay. The light of other days was the tallow candle, to-day the touching of a button illumines the whole factory or city with the intense electric light. Shall the old arguments against electricity in medicine prevail when newer methods are operative and successful? Shall the erroneous use of proper instruments or the use of outlawed applicators dictate that the agent itself is at fault or is a failure? Because an agent is limited to a certain class of work does it become a fit subject for rejection in toto? It seems to me rather to exalt it. Have not the diseases of women, as a class of diseases, been horribly abused by drugs? Has the glittering knife in gynæcological service never been abused? Is any one system all right and all others wrong? Why not the millenium now by using the best that can be obtained!

Are we ready for it? Should the name of the agent decide against it?

I must ask your indulgence for this digression—it may not have been in good taste to have brought it up here, nor do I know that there is any prejudice existing here against this agent, but other societies in other places are keeping alive the old discussions and our literature is filled with puzzling doubts regarding it. When shall we resort to electricity, and in what class of cases, and how shall it be administered? This is a general proposition. The specialist is oftenest consulted to relieve, first, pain; second, hæmorrhage; third, neuroses.

Shall electricity be the panacea in special practice? No, not in all cases. Will medicines properly affiliated and carefully chosen always cure? No. Will a surgical operation cure? No, not indiscriminately. I do not believe surgeons mean to dictate to the practitioners, but a short surgical operation seems to be a much easier way out, than months, may be, of medicine or massage, electricity or skilled nursing. Does the knife cure the pain? Happily in some cases it does. Does electricity cure pain? Indeed it does very frequently. What better off are we in having these two common remedies unless there is a constant factor somewhere that will decide for us which to employ?

Should the bistoury be used first or in second place with galvanism in any case of doubt? The fact that galvanism only relieves pain is sometimes used as an argument against its employment. Is it consistent? Could not the same be said of medicines, the hot water bottle, or the surgeon's plaster splint; shall they not be recommended? Then too, who will be bold enough to say when the current will only be palliative? Some specialists denounce in unmeasured terms the current and all that pertains thereto. Is it possible that an error of the head may outweigh the skill of the hands in the method of use?

That pain is one of the factors for which electricity seems

especially adapted is the universal opinion of its supporters. Who shall say when not to use it? Evidently not the physician or surgeon, but rather the electrician himself, and I shall illustrate this point in a practical manner.

In gynæcology the presence of small ovarian cysts are hard to accurately determine, and often the exploratory incision is used to make sure. The chief assistant in Apostoli's clinic said to me that for some years they had at the clinic been watching the effects of galvanism in cases of cystic ovary, and from my note book, dated June 9, 1891, I quote his words spoken in English, so there is no room for mistake in translation: "We are frequently using galvanism as a method of diagnosis or one of the methods for determining certain forms of uterine disease." "In cases of cystic ovary the galvanic current, carefully applied intra-uterine, twenty to thirty milliamperes for five minutes, will ninety-five times in a hundred cause pain with every application. The pain may not come exactly at the time of treatment, but it is almost certain to follow in a few hours and oftentimes is of a very severe nature. It may be possible for these patients to get along for some time with some sort of comfort, but there is very little, if any, improvement, and in the average, as I told you, there will be found a pathological condition existing, usually cystic ovary. On the other hand, in cases of uterine fibroids, the electric current is agreeable at once and can be increased rapidly to high intensities, and the patients begin to improve immediately. In either case, the current becomes a means of diagnosis."

In cases of diseased fallopian tubes, cystic or of inflammation, if pain be caused by the current, and the same is true when there is acute peritonitis, then great conservatism is necessary in using galvanism.

In cases of ovarian cysts the current is contra-indicated. These indications seem clearly defined and map out at once a very large field for the specialist in gynæcological practice, Grant that there is a decided hesitation about becoming

committed to galvanism as a curative agent, if these things be true, how can it be refused as a means of diagnosis? It may be claimed that unless one becomes expert in its use that these shades of diagnosis are very difficult to determine with accuracy. It may be true to a limited extent, but the use of galvanism can be acquired with study and practice.

At this place I wish to present the short history of a case that came under my care. Had one of her former physicians known of the clinical hint respecting the pain of a continuous current in ovarian disease, he would not willingly have subjected this patient to the questionable practice of force. Had I known of the fact also, I should, much earlier than I did, have requested the privilege of making the exploratory incision.

Mrs. —, age twenty years, married at sixteen, never pregnant. Venereal taint suspicioned, but there was absolutely no evidence to support it. A year after marriage she noticed very profuse menstruations, accompanied with great pain. The abdomen never increased much in size, but by conjoined touch a dense, hard tumor was outlined directly in the median line. The rectal touch made it even more clear that there was a dense and hard tumor, and the diagnosis of intramural fibroid tumor of the uterus in the posterior wall was made. A number of physicians agreed to the presence of a fibroid in this case. Prof. — advised galvanism, and daily administered it, using, as he claimed, the exact method as taught by Apostoli, yet the patient told me the story as follows: "I was determined if it were possible to get well; and if electricity would do it, I would stand it. So when the doctor would apply it he used to turn the full strength of his battery on, and he and his assistant would hold me forcibly down to the chair until the ten minutes were up, and then I suffered more, if anything, than during the treatment, for the next hour or two. For five months I followed this up almost daily. I could not stand the treatment any longer, and I was getting no better.

My pain almost drove me to suicide." For the next few months she was my patient, but so terribly sensitive was the endometrium from its cauterizations that I could not use galvanism intra-uterine once and simply tried palliative remedies. I never gave her a particle of relief, and so faithfully had she tried everything that she consented to the exploratory incision, which I made March 29, 1891, and found both ovaries cystic (multilocular), each ovary as large as a big orange. The right ovary was directly over the womb anteriorly, and the left directly posterior; the tension of the cysts was very great and their walls very thin; the tumors were bound down by extensive adhesions in all directions, that accounting for the solid feel. I removed both tumors. She made a good recovery from the operation. This case has gone upon record as a failure for galvanism to symptomatically cure a fibroid tumor of the uterus. I wish to place it where it belongs in the list, first as a failure to "find a fibroid before you cure it"; secondly, the faulty methods of using galvanism, I care not for what disease the patient was being treated. Such treatment was not in the interest of the patient, and was unwarrantable in the light of the literature of even years ago. No professor claiming to treat with and teach electro-therapeutics had a right to forcibly hold to the chair a writhing, screaming patient, daily, for months, upon the rack for a long ten minutes of torture.

I wish also to place before you a somewhat novel experience arising from the use of one of these little batteries that can be worn about the body or the limb while the patient is working or sleeping. It may have some significance just here.

A patient of mine had had an abortion performed a good many years ago; had been injured by a fall upon the ice; had a stone crushed and removed from the bladder; had been cured of a rectal fistula. She had also had a pelvic peritonitis that occasionally gave her great pain; for its

relief she tried a small battery, but it always increased her pain and she deserted it. A friend brought her a body battery with the advice to wear it at night only. It was accordingly charged and worn as requested.

During the night the patient awoke with a scream; help was summoned; a half hour afterward I was in attendance. I found the patient on the verge of collapse. I removed the battery, casually observing that at one spot, over the left ovarian region, where the metal had come in contact with the skin, that a burn had resulted. It took several hours to restore the patient to a comfortable condition. The burn could not account for the desperate condition of her illness. Several weeks went by before she tried this battery again. Again she suffered intense pain in the left side. Reluctantly she came to the conclusion that this battery was the cause of her suffering so, and she abandoned it. A few months after this I removed from this patient a large ovarian cyst; she made a prompt recovery. It is possible that the current acting for a long time upon the cystic ovary was the real cause of the alarming condition in which we found the patient the night above referred to. The patient has since used the battery for the intra-pelvic pains and with relief. I found, however, that the current with her is very variable, and is at best not a good form of treatment; or at least it is not attended with results that can be called satisfactory.

One other class of cases gives the gynæcologist a deal of trouble. I refer to the salpingo-ovaritis and the ovarialgias, and the sequelæ of nervous and hysterical manifestations. While they are frequently accurately diagnosticated there are several methods of treatment. One is by faradization, the current of tension having the preference, or that current that is taken from the long fine wire of the faradic battery. In instruments by far the best results are obtained by the bipolar intra-uterine or vaginal electrode. In fact it is the only accurate way of localizing the current to the best

advantage. The length of the time employed and the dose to be given is largely suggested by individual tolerance. Five to twenty minutes daily will be appreciated by the patient. What will the result be? Pain will be lessened materially. A soporific effect will be felt upon the tissues involved in the inflammatory stage: but the current may be impotent against the evolution of the inflammatory process. I put it mildly, may be. Should it not control it, the argument is not necessarily to contra-indicate its use, since the pain of inflammatory action is somewhat lessened without a question. A brighter view, however, can be taken of the ovarialgia and its hysterical symptomatology. Relief is the rule and many times even from the briefest course of treatment a permanent cure is established. It is not too much to promise in these cases that in perseverance the patient will find sometimes that her ovarialgia with its fret and tears is a thing of the past. In some cases this seems to be the only and the sovereign remedy. Electricity thus presents its credentials and testimonials in this class of cases. Perhaps a word of caution is necessary: this form of treatment commands that gentleness and moderation shall be strictly observed in the commencement; harshness and brusqueness are as much out of place as in the electro-cauterizations with the galvanic current. The milder powers cure in these places, and there are so many sources of comfort granted the patients by its use that really they are the most enthusiastic admirers of the treatment. Clinical experience adds a valuable point in diagnosis in this class of cases also. In the use of faradization in hysterical subjects there is a sort of intolerance that the operator very soon learns not to mind. The accents are not on the important words as it were, while in the inflammatory cases the intolerance commands respect. In the first, peace and happiness soon come; in the latter, faradization as an expedient is weaker, and of less value, the greater the amount of inflammation.

So much for definiteness in this class of cases. Had I time, however, I should like to recite to you the treatment of a case of hysteria at the clinic in Paris, and if my colleague, Dr. Ludlum, who was also present on that day, were here I am sure he would enlarge upon it with pleasure. It was to us very unique and suggestive. The patient had seemingly a very sensitive abdomen; she could not bear the touch be it ever so slight. The stomach reflex was also very great. She dreaded the contact of the electrodes. By the aid of faradization over the ovarian region, about a twenty minutes' séance, the abdomen could be manipulated at will. The electrodes were then placed at the neck, and soon the stomach reflex disappeared and the patient walked out entirely free from pain. Suggestion, as a factor in the hypnotic state, may possibly have been a factor, but the current was its means of impression upon the disordered nerves.

Uterine hæmorrhage is wonderfully well treated nowadays by galvanism. I must not lengthen this report beyond a few mere facts. Does the physician or the specialist keep in mind what it is to suffer from repeated hæmorrhage? Always think, when the patient talks of hæmorrhage, there is always a mental side to such cases.

Mrs. —, age thirty-four, referred to me by Prof. Cobb, whose history of her case confirms that of the patient in the respect of hæmorrhage. For some years the patient has had a fibroid tumor of the uterus. Intramural and hæmorrhagic only at the period. Upon closely questioning her about the flooding, she finally said, "Yes, I almost died from my loss of blood. Each month I made provision to be in bed for one week. I always folded up a rug made of rag-carpet and put on the mattress, then I put folded quilts over this and then clean old cloths. I was obliged to keep perfectly still, to cough or sneeze or to turn on my side would provoke such a flow as to cause great clots to leave me and then a steady stream of bright red blood would come until

it often seemed as though I would bleed to death. Very frequently the entire bedding was saturated from these hæmorrhages. I have often fainted away from my loss of blood." I beg the privilege to report the treatment of the tumor in my list of other cases of fibroids, and to refer only to the symptom of hæmorrhage. After five months of more or less regular galvanic treatment, twice a week, the hæmorrhage had become very much better, and once during the menstrual week the patient attended a dance without suffering in consequence.

She remains very much improved of her hæmorrhage now two years.

Concerning the factor of hæmorrhage in uterine fibroids I quote the following.* "We know now that the cases best treated are those who are suffering much from hæmorrhage—the more the better; cases in which something must be done; cases in which two or three years ago the question of operation of some kind would have been considered by us."

There is no doubt in the minds of progressive physicians of the good results of galvanism in the treatment of uterine hæmorrhage, and it is not arrogating too much to claim it as a recommendation in favor of its efficacy. The positive pole of the galvanic current has been found to be the better hæmostatic.

There is a simpler form of disorders that I may refer to with profit; one of the claims made for the therapeutic action of the electrical current is its power in regulating the currents of the vascular system. In pelvic congestions there is often stasis and venous and capillary engorgements. It not infrequently happens that during the climacteric the blood vascular system sends abnormal quantities to the periphery or to deep-seated glandular structures. The floodings of menstruation may cease, yet certain organs re-

* Contributions to the Surgical Treatment of Tumors of the Abdomen. Part II, by Thomas Keith and Skene Keith, Edinburgh. Page vi. 1889.

main surcharged with blood ; sometimes it is the face that receives the blood and keeps painfully red. So great is the determination of blood to certain parts that the extremities, hands and arms to the elbows, or feet and legs to the knees, are nearly bloodless and are always cold. Have you, as practitioners or specialists, tried with remedies to overcome these conditions? Have you ever failed? If so may I advise you to try gentle faradization from congested areas to the extremities using the current of tension or the current of quantity. I am sure that a few treatments will earn for you the gratitude of your patient. I could relate some interesting cases, but stop with only the hint.

I think I need not tell this society of the use of galvanism in controlling the uterine hæmorrhages of endometritis. It is here found to be that correct instruments are to be used to control the bleeding vessels, those adapted to the anatomical requirements. Intra-uterine electrodes, preferably those of platinum or carbon, made large enough or small enough to reach every part of the diseased endometrium, can be used with almost assured success. It may require some time and patience to perfect a cure, yet on the other hand so disappointing is this method that it happens sometimes that a single thorough treatment is curative.

This form of treatment, the *raclage* of this clinic, is in some skillful hands a close rival of the curette, and it is wonderfully efficacious.

THE MEDICO-LEGAL RELATIONS OF ABORTION.*

BY
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A case recently tried in the city of Chicago illustrates so well some of the mooted points in these cases, that we think

* Read before the Medico-Legal Society, June 10, 1891.

a brief recital of the more salient points may not be without interest. Text-books devoted to medical jurisprudence are notoriously deficient in dealing with concrete examples. Glittering generalities and broad deductions are to be found in abundance, but when we come to look for information on a specific point we mostly seek in vain.

In our account of the following case we shall not describe any of the collateral circumstances brought out at the trial, but confine ourselves to those few points that have a medico-legal interest.

The coroner's physician was called upon to make an examination of the body of a young woman dead about twenty-four hours. Decomposition was far advanced, the abdomen distended, and marked by post-mortem staining; the entire surface of the body was much discolored. On section, all the internal organs were softened, corresponding to the rather advanced state of decomposition. The uterus was about seven inches in length, and contained a considerable quantity of decomposing blood; no remnants of foetus or foetal membranes were found, but the surface of the uterus presented a circular denuded surface corresponding in size with that of a four months' placenta. The opinion was given that death was caused by blood poisoning, based upon the enlarged uterus with its open sinuses, and the rapid decompositions. It is manifest that the cause of death as here given was, in inference, to be sure, a most probable one, but still one that never acquires the force of complete demonstration. To illustrate: in this case had septic foci been found in the heart muscle, or the peculiar changes in the linings of the blood vessels, or disseminated foci of pus, this would have been a *demonstration* of blood poisoning. The evidence went to show that a strong liniment, containing a considerable quantity of hyoscyamus, had been prescribed for this girl, which she might by mistake have taken internally. Additional force is lent to such a

suggestion by the fact that the cause of death was inferential rather than demonstrative.

A point raised by the defense was as to the presence of a fœtus. It is at once apparent that this is a most important point, and one that we are frequently called upon to determine even when all the products of conception have been swept from the uterus. The chief indications in this case were the circular denuded area, the enlarged uterus, a corpus luteum of pregnancy, and the enlargement of the uterine blood vessels beneath this denuded area. The corpus luteum of pregnancy can be disposed of as having only negative value. The question then presents itself: Can certain tumors (polypi) cause enlargement of the uterus with an increase in the vascular supply beneath a circularly denuded surface? We must confess that it seems very doubtful, but are we prepared to deny the possibility in the light of our present knowledge, or rather want of knowledge?

We now need additional studies upon these questions, particularly as criminal abortion is becoming alarmingly frequent in this country, and the punishment of the guilty, as well as the protection of the innocent, should alike encourage us to seek for additional knowledge.

Will not some one study this subject carefully to see if additional signs of pregnancy cannot be determined after death, even when fœtus and membranes are entirely gone? Especially should we use differential studies on the vascular changes in the uterine wall in tumors and pregnancy, as we are satisfied that it is upon this line that a solution will be reached.

Another interesting question is as to the legal *corpus delicti* in these cases, that is, the criminal abortion. Of course, collateral, circumstantial, and other evidences will do much to establish this, but the question always presents itself, Was the abortion criminal? It is apparent that an abortion from natural causes may be attended by circumstances that make it appear criminal, and the most is made

of this argument in the defense of these cases. While convictions for abortion may be obtained on the confessions of accomplices or other evidence; failing these, it is doubtful if they can be sustained, excepting where there is direct evidence of the administration of an abortifacient drug, or the marks of injury or violence are found on the person of the mother or upon the fœtus.

It is apparent that abortions are done secretly, with no one but the operator and victim present. They are rarely investigated unless the victim dies, so that the post-mortem appearances are of the greatest importance. Under such circumstances can the *corpus delicti* be said to be proven, unless there is evidence to show the *criminal* nature of the act, and how is this to be shown unless there are some marks upon the fœtus or upon the person of the mother? We need not carry our analysis of the subject farther to show what relation the natural abortion bears to the doctrine of reasonable doubt as laid down in criminal cases. The fact remains that a conviction for criminal abortion is next to impossible unless marks of direct violence are found.

INFLAMMATION OF THE UTERINE APPEND- AGES—GENERAL CONSIDERATIONS—CLASSI- FICATION OF THE SALPINGITES.*

BY

PROF. SAMUEL POZZI,

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In the attempt to understand the close connections between the uterus and the fallopian tubes, it must be remembered that they have a common embryonal origin. At the end of the second month of intra-uterine life, Muller's

* Translated for the HOMŒOPATHIC JOURNAL OF OBSTETRICS by the Editor, from Pozzi's *Traité de Gynécologie*.

ducts fuse inferiorly to form the uterus and the vagina, while they remain distinct above and constitute the tubes. The latter are in reality only the slender prolongation of the uterine cornua. There is an immediate continuity between their different coats, from which arises the possibility of an ascending salpingitis consecutive to metritis, even as an ascending pyelitis is consecutive to an inveterate cystitis. The ovary, connected to the tube by the tubo-ovarian ligament, is in almost immediate contact with its pavilion and may be infected by contiguity. These organs are also united by important vascular and lymphatic connections. I need scarcely remind the reader of the anastomoses of the utero-ovarian arteries and veins with those of the uterus. Still more important are the lymphatics. Championnière has described, in particular, at the angles of the uterus, superficial lymphatics which are lost in the broad ligament behind and below the tube, between the tube and the round ligament, and especially below the ovary and the tube. Deep lymphatics also exist, forming a second plane, that are only seen by cutting the uterine angle perpendicularly. There is a remarkable lymphatic group occupying the space between the tube and the ligament of the ovary. Important relations, completing the already close anatomical connections, are thus established between the ovary and the tube. Thus there is, so to speak, no ovaritis without salpingitis, and no salpingitis without ovaritis; the inflammations of the appendages are, then, properly combined in the same description.

Almost always the inflammation passes from the tube to the ovary directly by contact and by adhesion. But, sometimes there is also observed a suppuration of the ovary without continuity with the inflammation of the tube. This fact can then be explained by the lymphatic relations. The vessels which come from the pavilion follow the external lateral ligament and empty into the large lymphatic plexus, called the sub-ovarian plexus. There is then no difficulty

in comprehending that an abscess of the ovary may be observed with relatively small lesions of the oviduct. The adhesions, which are rich in lymphatics, may thus serve to carry the inflammation.

The lymphatic network which covers the surface of the ovary also communicates extensively with that of the peritoneum. According to Waldeyer, it is sufficient to puncture the ovary with a tube for lymphatic injection to fill all the network of the abdominal serosa. If, then, the peritonites consecutive to inflammation of these organs usually remain circumscribed, it is, without doubt, because an early stage of the processes consists in a plastic obliteration, in a sort of adhesive lymphatic thrombosis.

Finally the subperitoneal cellular tissue that exists in the wings of the tube and of the ovary is in connection with that of broad ligaments, which is itself continuous below on the pelvic floor and on the sides with the lamellar tissue folding in with the peritoneum and offering a special laxity in front of the bladder, in the pseudo-cavity of Retzius (Fig. 206). The knowledge of these peculiarities is indispensable for the explanation of the deep and the superficial propagation of the inflammation.

The classifications of the salpingites that have been given differ markedly. Cornil and Perrillon admit: 1. Vegetating catarrhal salpingitis. 2. Purulent salpingitis (pyo-salpinx). 3. Hæmorrhagic salpingitis (hæmato-salpinx, hæmatoma of the tube). 4. Blennorrhagic salpingitis. 5. Tuberculous salpingitis. This classification is incomplete, for it leaves out certain forms of diffuse interstitial inflammation that are met in the chronic affections. It is a little defective in separating the tubercular and blennorrhagic forms from purulent salpingitis, as they are only simple varieties of the latter. Orthman makes this division: 1. Catarrhal salpingitis, with the varieties simple, diffuse, blennorrhagic, hæmorrhagic, follicular. 2. Purulent salpingitis, which may be septic, blennorrhagic, or tubercular. 3. Hæmato-salpinx.

4. Hydro-salpinx. 5. Pyo-salpinx or purulent cystic salpingitis.

From both the clinical and anatomical point of view, I believe it is important to divide the inflammations according as they do or do not terminate in the formation of an encysted tumor. We then will have :

- | | | | |
|----------------------------|---|---|--|
| | { | a) Acute catarrhal. | |
| | { | b) Acute purulent. | |
| I. Non-cystic salpingitis. | { | c) Chronic parenchymatous pa-
(chy-salpingitis). | Hypertrophic, or vegetating variety.
Atrophic, or sclerous variety. |
| | { | a) Hydro-salpinx, or serous. | |
| II. Cystic salpingitis. | { | b) Hæmato-salpinx, or hæmorrhagic. | |
| | { | c) Pyo-salpinx, or purulent. | |

I do not in this classification take the etiology into account, for a blennorrhagic salpingitis may evolve according to the most diverse types; type purulent non-cystic, purulent cystic or pyo-salpinx, which may be ulteriorly transformed into hydro-salpinx or terminate in the formation of a parenchymatous salpingitis.

OÖPHORO-SALPINGITIS WITHOUT CYSTIC TUMOR.

Pathogeny—Etiology.—Does there exist a primary ovaritis, an initial and original lesion in connection with menstrual disorders, with sexual excesses, independent of any infection or antecedent lesion of the uterus and tubes? Dalché and Prochownick have recently maintained this view, but without sufficient proof. It appears doubtful to me. I do not believe that there exists a positive example of ovaritis, properly so-called, without a previous endometritis and salpingitis. In truth, both of these stages may have been definitely marked without leaving permanent anatomical traces, but they can be reconstructed from the study of the antecedents.

I shall employ, then, by preference, the term tubo-ovaritis or oöphoro-salpingitis, and if I happen to abbreviate by saying salpingitis or ovaritis it will be understood that these terms signify a mixed lesion. Inflammations of the uterus, without contradictions, are the great source of inflammations of the appendages. It is by continuity of tissue, from place to place, by the mucosa, that the infection ordinarily occurs, whether it relates to a specific inflammation or to any other. Schröder admits this. In a recent discussion at the Société de Chirurgie, this opinion was expressed by the majority. Championnière, nearly single-handed, defended propagation by the lymphatics in all cases, a method of propagation which he first admitted for puerperal accidents exclusively. He relies, in particular, upon the relative integrity of the uterine extremity of the tubes, in cases where the external two-thirds is excessively affected. To this it may be replied that there is not an histological indemnity, but a simple apparent indemnity, for the tube, almost healthy to the naked eye, is at this place markedly inflamed under the microscope. Besides, analogous interruptions are found in the series of the lesions propagated from the bladder to the ureters and to the kidneys. However, the role of the lymphatics cannot be neglected. The extreme frequency of adhesions uniting the fundus uteri to the appendages is well known. Now, these adhesions are, as Poirer has shown, almost entirely composed of lymphatics, bringing the sub-endothelial network of the uterus into communication with the lymphatics of the appendages. It is not improbable that these adhesions may be the result of the action of a previous metritis of the deep lymphatics, of which the sub-endothelial plexus is only a prolongation. The inflammation of the uterus may follow this route to the tubes and ovaries, especially if a new pathological influence gives it a fresh impulse.

However this may be, if a catarrhal endometritis lasts some time, the tubes become more or less affected, but the

symptoms on this side are too slight to call the attention of the physician to the epiphenomenon. In intense metritis with slight salpingitis the latter is not noticed, and only the metritis is treated. On the other hand, in a marked salpingitis, a slight metritis, the source of the tubal affection, may easily pass unnoticed. The very great frequency of endometritis explains that of the lesions of the tubes, inasmuch as a passing metritis is generally succeeded by a permanent lesion of the tubes. Winckel, out of 575 female cadavers, has found more or less marked lesions of the tubes in 182 cases. Lewers, out of 100 autopsies at the London Hospital, found the lesions of hydro-salpinx, of pyo-salpinx, or hemato-salpinx in 17 cases. Gallabin, from 1883 to 1886, found in Guy's Hospital 12 cases out of 302 autopsies, or 4 to 100. Lawson Tait remarks that this hospital draws its patients from a better class than the London Hospital, and blennorrhagic and puerperal infection is less frequent.

Blennorrhagic infection is the most usual cause of inflammation of the tubes, if we may believe Nöggerath. He attributes a special importance to inoculations of blennorrhagic virus, which might be called attenuated, that is the result of an old male blennorrhœa, where the remains of an acute infection are reputed both incurable and inoffensive. A considerable number of young married women are thus infected, and it is believed that the supposed influences of early intercourse are responsible. A slight endometritis and an intense catarrhal metritis are often produced in this way. Abortion results, aggravating the pre-existing disease and leaving the woman a chronic invalid and sterile.

The blennorrhagic infection sometimes gives rise to much more serious evils, giving rise at once to the formation of pus in the tubes, which may be encysted or be propagated to the pelvis. This is the form that Bernutz has especially described, and that I have frequently observed at Lourcine. I saw in one case a true blennorrhagic pyæmia occur suddenly, with multiple foci, and independent of dissemi-

nated suppuration in the subperitoneal cellular tissue and in the thickness of the mesentery. There existed an intense vaginitis with pyosalpingitis. The gonococcus of Neisser cannot always be found, even when the blennorrhagic origin of the affection is evident. It has been clearly demonstrated, however, a number of times.

Puerperal infection which succeeds to an accouchement, and especially to abortion occurring in septic conditions, belongs in the first rank as a cause of inflammation of the appendages. In women affected by blennorrhagia, at the time of parturition, there is, it seems, a mixed infection, puerpero-blennorrhagic, which explains why metro-salpingitis is so frequent in such cases. It is especially in metritis, following abortion, with retention of the débris of the placenta, that secondary lesions of the tubes are to be feared, and this is not one of the smallest reasons why we should then prefer an energetic interference (blunt curette and irrigations) to expectation, or to the timid interference which some authors advise. The cures they obtain are often only such in appearance. The woman who carries neurotic débris in the uterine cavity for some days is almost surely condemned to a metro-salpingitis.

Infection by Exploration and by Obstetrico-surgical Intervention.—The sound has made numerous victims and the same is true of discision of the cervix, before the antiseptic period. Even to-day it must be remembered that to expect intra-uterine exploration to be without danger, not only must the finger and the instrument be aseptic, but the cavity of the cervix must also be put in the same condition by successive douches. The presence of a cause of infection in the cervix affords a complete explanation of certain metrites and salpingites that are without other appreciable etiology than an obstruction to the evacuation of the cervical secretions by a deviation or a stenosis.

The normal drainage of the mucus charged with virtually pathogenetic microbes occurs with difficulty; there is a re-

flex into the uterine cavity, often after a very marked dilatation of the cervix. Can an auto-infection be thus produced? It is certainly not to be doubted that inflammation of the uterus and of the appendages is very frequent in these conditions.

Tubercular salpingitis may occur with other disorders of the same nature of the genital apparatus and be lost, in the midst of other lesions. But in very many cases it has been observed as an isolated lesion. Is it auto-infection or hetero-infection (by the introduction of tuberculous spermatozoa into the genital passage) to which tubercular salpingitis must be attributed? The place of entrance of Koch's bacillus appears to have been through the genital passage in many observations (Conheim, Verneuil). However, there are a number of cases of tuberculosis of the appendages in virgins which are not thus explained. In these cases, it is probable that an ordinary auto-infection, septic, has first been induced by a stenosis of the cervix, and that the bacillus, introduced into the circulation by the lungs or digestive tract, is fixed on the inflamed tubes as the place of least resistance. This hypothesis is in accord with the views which tend to prevail in general pathology on what is called pre-tubercular inflammation.

Malformations and congenital atrophies of the tubes also constitute a true morbid predisposition, that Lawson Tait and Freund have perhaps exaggerated.

I only remind the reader of the rare influence of the eruptive fevers, notably that of scarlatina or that of variola, so well established by Tait, and that of the very problematic contagion of genital papillomata, noted by Alban Doran, to explain a papillomatous salpingitis, the exact nature of which remains undecided.

The evidences of syphilitic salpingitis that have been cited are open to criticism. New observations on this subject are necessary.

PATHOLOGICAL ANATOMY. I. LESIONS OF THE TUBES.
—These lesions are more constant and more characteristic than those of the ovaries, at least in the acute forms. Their mucous surface is, in fact, more vulnerable than the serosa that surrounds the ovary.

The comprehensive term catarrhal salpingitis has been much abused. If the published observations are examined, it will be seen that it has been applied to the most diverse pathological conditions. All the inflammations of the tubes, that are not purulent, have been placed in this class, from a simple slight endo-salpingitis, accompanying an ephemeral endometritis that has been spontaneously cured, to the hypertrophic pachy-salpingitis with luxuriant vegetations of the mucous folds and excessive thickness of the walls. It is this confusion which makes it so difficult to estimate accurately the therapeutic merit of numerous operative measures from the results recently published. When it is understood that a tube only slightly increased in volume, and more or less inflamed, merits, in the opinion of some surgeons, the accusation of salpingitis and condemnation to a removal, we hesitate to indorse the value of a brilliant series of operations which only demonstrates, in fact, the incontestable simplicity and actual inanity of castration with antiseptic precautions. That it may be otherwise, it will be indispensable to have every observation on extirpation of the appendages, accompanied by a brief but precise description of the lesion, in place of justification by a vague epithet.

I also believe that it is necessary to carefully distinguish acute catarrhal salpingitis from chronic parenchymatous salpingitis with acute aggravation, with what has sometimes been confounded with vegetating catarrhal salpingitis. What renders this confusion easy is that many women are operated on when the chronic lesion has undergone an acute aggravation modifying its exact chronology.

Finally, acute purulent non-cystic salpingitis must not be

confounded with purulent cystic salpingitis, or pyo-salpinx, which is a result, if the former is prolonged, but is also as distinct as pyelo-nephrosis is from pyo-nephritis.

In acute catarrhal salpingitis a hypertrophy is first noted. The organ is swollen in the form of a cylinder from the size of the little finger to that of the thumb, as much from infiltration of its wall as from that of the subserous tissue. Being connected by its inferior border to the wing of the large ligament the tube is indented, moniliform, and curved. The pavilion is sometimes stretched and turgescient, more frequently folded on itself in the form of a folded star. Transparent false membranes, generally thin, soft, lamellar, or filamentous, allow the blood vessels to be seen that sometimes connect the tubes to the ovary and to the contiguous parts. The surface of the tube is pinkish, the pavilion of a brighter color. On section, the cavity is seen filled by the normal folds in an hypertrophic condition, of a reddish gray or silver gray color, giving them a vegetating appearance. Mucus sometimes oozes from the surface.

The histological examination shows that these lesions are especially marked in the mucosa. The folds are covered by lateral granulations of new formation; in place of being thin and sharply defined, the folds are thick and blunt. Many of them are astomose in arcades at their internal extremity, giving the section a reticulated appearance. The framework of these vegetations is cellulo-vascular, infiltrated with embryonic cells. A layer of ciliated cells still covers them in some portions. The lesions are relatively but slightly marked in the fibro-muscular tunic. Only a hyperplasia of its elements is found.

Acute purulent non-cystic salpingitis is more rarely observed than the encysted form, or pyo-salpinx, in which it surely terminates if it lasts some time, and if the pus does not escape easily by the uterine orifice. According to Freund, this unfavorable condition is especially associated

with an incomplete development of the oviduct. He claims that two classes of tubes can be recognized in the healthy woman; the first almost straight and of normal caliber, the second curved and of a caliber narrowed in some parts, a vestige of an infantile state. In the first class, the tubal affections are of rapid evolution and may be spontaneously cured. In the second, the suppurative inflammation necessarily terminates in the formation of encysted collections—in consequence of atresia of the oviduct. This malformation will be suspected from the delicate complexion of the patient, dysmenorrhœa, and the retarded appearance of the menses. It is impossible that this condition should be taken into consideration, but more frequently it is probable that an intense inflammation may be sufficient to produce, outside the protective occlusion of the abdominal orifice, a swelling and an infiltration of the walls, so that the caliber of the tube becomes obliterated or ceases to be permeable on the uterine side. This often happens in blennorrhagia.

However, the transformation into pyo-salpinx is always preceded by a phase of acute purulent salpingitis, profluent; that is, with permeability of the ostium uterinum, and free exit for the purulent secretion. If operation has been performed, at this moment all the external signs of an intense inflammation of the tube are observed: swelling, flexuous curvature, and even a nodular appearance of the oviduct. The fimbriæ of the pavilion are agglutinated so as to close the abdominal orifice. If the organ is incised, pus is found in the cavity. The cavity sometimes has a moniliform appearance. The pus, creamy, like that of recent formation, may empty into the uterus through the uterine orifice, while the abdominal opening is obliterated by the fusion of the fimbriæ of the tubes. The microscope shows, in transverse sections, very thick folds covered with anastomosing granulations, forming a system of principal and of secondary reduplications whose union produces irregular cavities resembling glands. This thickening is due to the abun-

dance of migratory cells which infiltrate the connective tissue. The ciliated cells have almost disappeared and the epithelial cells are deformed, becoming cubiform or flattened, only preserving their form in the sinuses which separate the folds. Here the culs-de-sac are lined with short cylindrical epithelium, producing a resemblance to glands. The whole thickness of the wall is also infiltrated with migratory round cells and the vessels are large and dilated (Cornil).

When purulent salpingitis is not transformed into pyosalpinx, it may undergo a spontaneous cure, as has been proven by clinical observation. This retrogressive process is rare, and during this time the patient is exposed to the reappearance of the acute condition. When it is accomplished, the resolution occurs by induration, as the older writers say; that is, with the formation of embryonic connective tissue, which terminates in hypertrophy of the organ, at least temporarily—in pachy-salpingitis.

Cornil (Fig. 1) has shown a good specimen of purulent salpingitis, seemingly in the process of evolution. The primarily isolated vegetations reunite and constitute an embryonic tissue which at first appears homogeneous. From this results a layer of new tissue, which separates the wall of the tube and narrows its caliber by presenting in the cavity small projections, consisting of embryonic tissue or granulations.

In chronic parenchymatous salpingitis, it is the rule to find both tubes attacked, while the very acute and slight lesions may be unilateral. This peculiarity is the origin of Tait's radical precept, to always perform ablation of the two sides, the second being almost certainly destined to be attacked after the first. Marked lesions affecting the ovary, periovaritis, sclerosis, are also frequently observed.

In the majority of cases the appendages are fixed to the pelvic wall or to Douglas's cul-de-sac by very strong adhesions. These adhesions may even be so firm that the ovary and the tubes can only be released by an actual laceration.

tion. The thickened tube sometimes becomes as hard as a cord. The lesions that occur, in place of being almost entirely confined to the mucosa, as in the preceding forms, are propagated to all the thickness of the walls. It may even be said that the alterations of the middle coat of the

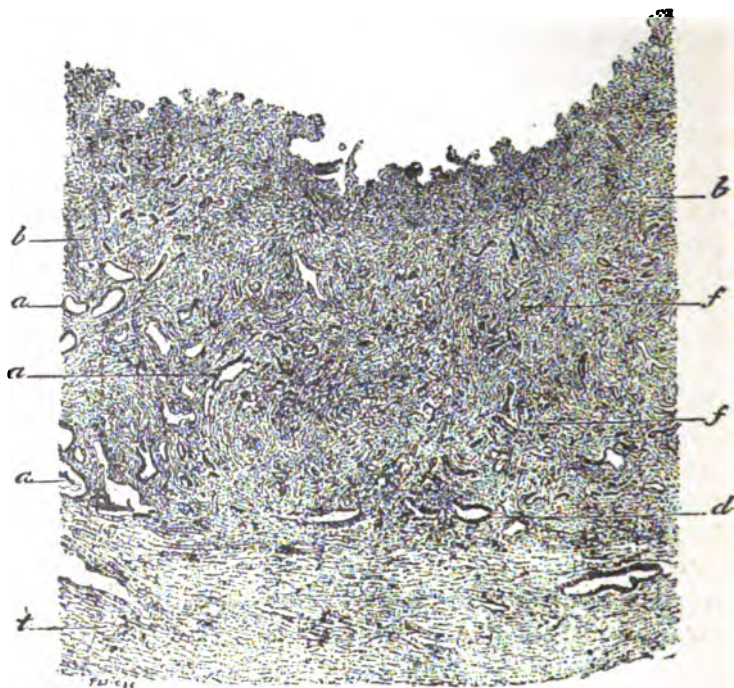


FIG. 1. Acute purulent salpingitis (12 diameters). *t*. Connective tissue of the wall. *v*. Vessel. *b, b*. Embryonic tissue with cavities. *a, a, a*. Lined with epithelial cells and with more narrow openings. *f, f*. Also containing epithelial cells. *d*. Cavities of the same nature near the wall (Cornil).

parenchyma, are here of the greatest importance. Chronic salpingitis, even much more than chronic metritis, is then essentially parenchymatous. On section, a great thickness of all the walls is seen. The mucosa has a slate color. The external orifice is always obliterated; sometimes it adheres to the ovary quite loosely. The uterine orifice, on the con-

trary, is most frequently open. This lesion has also been called pachy-salpingitis, or interstitial salpingitis, from the considerable proliferation of connective tissue that the microscope shows. It is the analogue of chronic epididymitis with sclerosis of the cord.

Two anatomical varieties of this lesion may be distinguished, corresponding exactly to what is also observed in parenchymatous metritis. In the first variety there is chronic hypertrophic salpingitis. The tube, of a size from that of the little finger to that of the index, is of a violaceous color, and of fleshy consistency. If it is incised, there is found a thick shell, either of hypertrophied muscular tissue, or connective tissue of new formation and, within this, filling the interior of the canal of the tube, a pulpy substance of a brilliant and silvery aspect, formed by the vegetating mucosa with its epithelium very much altered. The abdominal extremity is obliterated, the uterine extremity is simply narrowed. The condition seems to be the result of an old purulent salpingitis that the permeability of the ostium uterinum has prevented from becoming cystic. In my observations, as in those of Kaltenbach and Schauta, there were positive blennorrhagic antecedents. These authors attribute some influence, perhaps exaggerated, to the muscular hypertrophy in the production of tubal colic. This may be observed when the hypertrophy of the tubal wall is purely of the connective tissue form, and these painful attacks appear to be due to the compression of the nervous filaments, to a perineuritis which has been well demonstrated in Sawinoff's preparations.

Another variety of chronic salpingitis can be called atrophic. The cellular infiltration of the tubal wall, in place of giving origin to a persistent product, to permanent proliferation, as in the preceding case, produces retraction of the tissues by reabsorption. It is probably only a more advanced stage of hypertrophic pachysalpingitis, passing to the state of cirrhosis of the tube. The muscular structure dis-



FIG. 2.—Chronic hypertrophic salpingitis (10 diameters). 1. This and sclerosed wall. 2. Thick and fused villi. 3. Pseudo-glandular formations. 4. Blood-vessel. 5. Accessory canal of the tube.

appears before the fibrous tissue, the whole organ is retracted, and, in the most extreme degree, is transformed into a hard and impermeable cord. Bolt has well described these lesions. In several cases he has seen the lumen of the

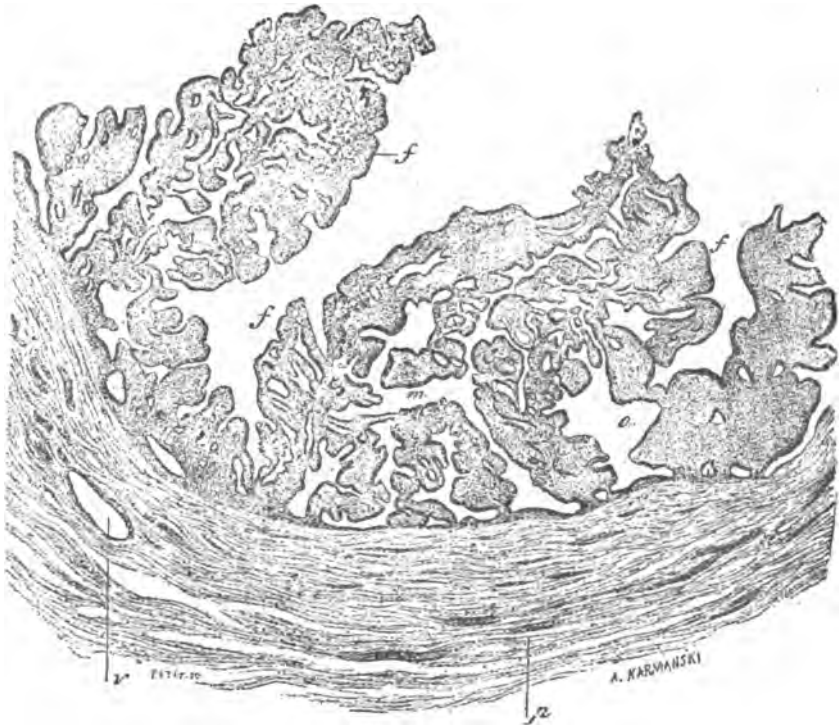


FIG. 3.—Acute purulent salpingitis (12 diameters). *f, f.* Vegetations. *p.* Wall of the tube. *v.* Vessel (Cornil).

tube completely effaced by the agglutination of the walls. He notes the complete destruction of the epithelium that is then produced, as in cirrhosis of the liver and kidney. Orthman gives the name of follicular salpingitis to an anatomical lesion which does not merit designation as a distinct variety. It relates to cystic cavities in the wall, which give it an areolar appearance. This pseudo-glandular

formation is common to all forms of inflammation of the tube (Figs. 2 and 3). In all the varieties that I have described the tube may continue to form a canal open at its two extremities, and the permeability of the ostium uterinum will allow evacuation of the mucus as it is formed. From this proceeds the absence of ampullar or cystic dilatation.

(To be concluded.)

• EDITOR'S TABLE. •

—There is a form of albuminuria occurring in young children, that Dr. Séjournet considers more frequent than generally believed. He has observed cases of this description in young subjects, of from 11 to 16 months of age, brought up on a bottle, or subjected to a very defective diet after weaning (*Journal de Médecine et de Chirurgie Pratiques*). These children are generally fed too frequently, and from this irregular alimentation acquire a large abdomen, with dilatation of the stomach and even increase of the volume of the liver. In these cases, the albuminuria succeeds to digestive disorders, expressed by vomiting and diarrhœa, or the affection assumes the course of athrepsia and terminates in denutrition and emaciation; or, again, it takes the form of a more or less acute gastro-enteritis. M. Séjournet attaches the albuminuria to the gastro-intestinal disturbances. In fact, in the dilated stomach, in the distended intestine, embarrassed by badly digested products, there occur abnormal fermentations with the production of toxic substances. These infectious products, after absorption, exert their influence on the entire organism, and in filtering through the kidneys are capable of producing disturbances in these organs which, commencing as simple congestion, terminate in nephritis. Thus a veritable auto-intoxication explains the pathogeny of the albuminuria in these cases. A curious symptom, denoting the congestive or inflammatory conditions of the kidneys, is the anuria which almost always accompanies this albuminuria. One of

Séjournet's patients passed only 12 grammes of urine a day, and another passed no urine at all for two days and a night. This anuria should always cause suspicion of renal lesion or obstruction, with possible albuminuria. After the anuria, the most marked objective sign is the swelling of the feet, but this may be wanting. The quantity of albumen is variable from 0.25 to 1.50 gramme. The duration of the disease in Séjournet's observations was from two to four weeks.

* * *

—The question of artificial food for infants is ever with us, and, though much has been accomplished in this direction, it is evident that we have not yet arrived at perfection. Even the much-praised sterilization of cow's milk has its imperfections, for a joint paper by Professor Leeds and Dr. E. P. Davis (*Amer. Jour. Med. Sciences*) points out some serious faults in its nutritive qualities. The former describes the starch-liquefying ferment in milk which renders starch paste entirely fluid and capable of passing through a filter. This ferment is coagulated and destroyed by sterilization, which also has the effect of rendering the caseine less readily coagulable by rennet. The peptic and pancreatic digestion of sterilized milk (that is, sterilized at 100° C.) is less complete than that of raw milk. Professor Leeds believes that milk may be rendered "practically sterile" by heating to 68° C. (155° F.) for six minutes without suffering any important diminution in its digestibility; ordinary commercial milk being always more or less acid on delivery, it is necessary before sterilizing in this way to neutralize or render it slightly alkaline with carbonate of soda or lime water. A still more advantageous method is said to be sterilization and peptonization at the same time, the proteid matter of which the micro-organisms are composed being digested away and their vitality destroyed. This is effected by maintaining the peptonizing mixture at 155° for four minutes. Dr. Davis deals with the result of observations made on infants in the Philadelphia Hospital; acute enteritis subsided under the use of sterilized milk, and no case of cholera infantum occurred in the hospital; cases of acute diarrhœa treated as out-patients by sterilized milk speedily recovered. On the other hand, it was

found that though exempt from acute intestinal disorders, nutrition did not improve, and the infants died, in two or three weeks, of malnutrition. Infants removed to a different atmosphere and given fresh raw milk rapidly improved. The infants while in hospital were also subjected to antiseptic intestinal treatment. Koplik (*Arch. of Ped.*, June, 1891) gives a summary of previous observations upon the effect of sterilization on the digestibility of milk. Hueppe recognized a change in chemical composition occurring gradually at all temperatures between 75° C. (155° F.) and 100° C., but thought that the digestibility was scarcely diminished. Munk, Hueppe, and Chapin have all pointed out that the casein of milk suffers a change in sterilization, and is less easily coagulated by rennet. Hueppe found that milk was more rapidly and certainly sterilized and protected from subsequent acid fermentation by steam than by the boiling bath (twenty minutes in the former being equivalent to one hour in the latter). Hirst has suggested the addition of pancreatin before sterilization "in order to digest and help the digestion of caseine made difficult of digestive solution during steaming."

May it not be possible, also, that fresh milk contains a certain amount of vital force that would be destroyed by sterilization.

* * *

—Nissescu, of Bucharest, has been collecting data for some time for a work on twin pregnancy. The first portion of this thesis comprises the generalities, relating to the mode of production, to the causes, and to the frequency of twin pregnancies according to the country. During sixteen years there have been registered at the Maternity of Bucharest 161 twin pregnancies, and this author has collected a table of the variations which relate to the sex, the presentation, the appendages, etc. He records two cases of the fœti superposed in T and T. According to this author, this position has only been observed once to the present time. The conclusions of the work are : 1. The frequency of twin pregnancy at the Maternity is in the proportion of 1 to 67. 2. The number of twin pregnancies is nearly four times the greater in multiparæ. 3. The sexes in the order of frequency are : both masculine ; both feminine ; different sex ;

most frequently the first born is the male. 4. Precocious accouchements are more frequent, seventy per cent. 5. The diagnosis in the first six months is only probable. 6. In the last months the certainty of the diagnosis depends on the position of the fœti. There are three varieties of positions: (*a*) fœti situated one at the side of the other; (*b*) one above the other; (*c*) one before the other. 7. Palpation and auscultation do not give positive signs. 8. Vaginal touch assures the diagnosis in very rare cases. 9. The difficulties of diagnosis are: considerable œdema of the abdominal walls, too great tension of the uterine wall, hydramnios, particular excitability of the uterus, the death of a fœtus, and the third variety of position. 10. The diagnosis during accouchement is important on account of the accidents which may follow.

● GOLDEN GRAINS. ●

—The importance of proper ventilation for the schoolroom becomes evident when we consider that to the poisoned air of respiration are added the emanations from the uncleanness of body and clothing. Besides, the air of the schoolroom is impregnated by many of the odors of disease, the discharge of ulcers, skin diseases, decayed teeth, unhealthy throats and nasal cavities, and fetid eructations. With regard to the emanations from the skin and from the lungs, it is estimated that a schoolroom of fifty pupils would throw off, in the form of cutaneous and pulmonary exhalation, in one month of five hours each day, 750 lbs., which contains much putrescible matter and in rooms deficient in ventilation this is precipitated, and gives in its decay the peculiar odor of the badly ventilated rooms.

—According to Pinard, hot injections, whether vaginal or uterine, have a marked effect in increasing the contractile power of the uterus during labor. The contractions under such influence have a greater amplitude and longer duration than under ordinary conditions, but are not usually increased in frequency.

They have been observed to be of sufficient efficiency to shorten labor, and hence are indicated in cases in which the period of dilatation is longer than usual. Especially are they indicated in cases in which the death of the foetus and rupture of the foetal sac demand a rapid expulsion, and this rule applies as well in cases of abortion as of those of labor at term. During the period of delivery hot irrigations have the same effect as during the precedent period of labor. They have not only an oxytocic, but an hæmodynamic action. Should post-partum hæmorrhage occur, an intra-uterine injection of water at 115° to 122° F. will probably produce prompt contraction of the organ, and after a short time the injected water will flow out colorless. During the puerperal period involution may be hastened by the uterine or vaginal irrigation, and should metrorrhagia occur during this period it may be checked with irrigation at 113° F.

—Ashby (*Practitioner*, June, 1891) refers to the difficulty of determining whether in those children who are hemiplegic, and who give a history of severe convulsions, these caused minute hæmorrhages which gave rise to the convulsions, or whether the convulsions and the hemiplegia were both caused by hæmorrhages. He is inclined to think that often the convulsions are the cause of the hæmorrhage, and he gives the following case to support this view. A child two years old was brought to the hospital suffering from right hemiplegia. The history given was that at the age of two years he had several severe convulsions, attributed to indigestion; before these he was apparently quite healthy, but afterward it was noticed that the right arm was useless, and he dragged the right leg. Until the age of ten he had many fits, but since then he has been free. He died of tuberculosis a few months after admission. The brain appeared healthy when examined externally, but on section several small old blood cysts were found in the neighborhood of the corpora striata on both sides, but they were very much larger on the left side than the right. Dr. Ashby believes that at the age of two convulsions gave rise to the hæmorrhages, and the paralysis supervened upon them, for there is nothing whatever to indicate that any thrombosis, embolism, or arteritis could have caused the hæmorrhages.

—*Brit. Med. Jour.*

—With regard to the existence of scalp tumors at birth, Dr. F. W. Goodall (*Jour. of the Am. Med. Assn.*) advances the following: Personal observation of the phenomena of labor teaches me that the caput succedaneum is due to a lack of support of that portion of the head which engages within the ring of the cervix, and later on is found in the vagina with nothing to support it but a species of void, during the pressure of the combined forces brought to bear upon every inch of the remaining superficies of the foetus. This small unsupported area represents, or is the point of impact, so to speak, of all the tremendous force hurled upon the foetus as a whole, at every repetition of the labor pains; and in consequence of the varying position of the head, due to rotation, we get a little change in the position of the so-called point of impact, and in protracted, tedious cases, different points of impact remain nearly stationary, long enough to give rise to an individual tumefaction for the varying positions, thus giving rise to one or more tumors, as the case may be.

—Dr. Troitzky, of Kieff, reports (*Arch. f. Kinderhkl.*, 5 u. 6; *Münch. Med. Woch.*, June 9) excellent results from washing out the stomach in children. His report deals with sixty-four cases. He used a Nélaton's catheter, and injected either boiled water or a 1.5 to 2 per cent. solution of benzoate of soda. He considers the method particularly valuable in the early stages of gastric and intestinal disorders, preventing them from becoming serious. The most rapid results were obtained in simple gastric dyspepsia without fever; longer treatment was required in gastro-intestinal, and still longer intestinal, dyspepsia. In chronic dyspepsia, also, prolonged treatment was necessary and ordinary internal remedies were also needed. In acute specific gastritis and enteritis and acute diarrhoea, washing out of the stomach was of use as an adjuvant.—*Brit. Med. Jour.*

—Alexandrow (*Archiv. für klinische Chirurgie*, Bd. 41) advocates the high operation for children. Its main advantage is that the bladder can be sutured, and thus primary healing obtained. Out of twenty-six cases of his own, no deaths occurred. The bladder is to be washed out with sublimate solution, one or two parts to 3000. Then 150 to 200 grms. three per cent. boracic

solution is injected. Tamponing of the rectum is not necessary. An incision four centimeters long is made upward from the symphysis pubis, the muscles and fascia cut between two forceps, and the prevesical connective tissue divided and pushed aside with the scalpel handle. The wound is kept open with retractors and the peritoneum held upward with a blunt hook. The bladder being fixed by two silk sutures is then opened and washed out with sublimate solution and the wound sewed. The stitches go down to the sub-mucosa, and five are used for an incision, two and five-tenths centimeters long. A soft catheter is left in the urethra and removed in from one to three days. Drainage of the prevesical space is deemed unnecessary.

—The following conclusions in regard to the proteids of milk have been published by Dr. W. R. Halliburton.

1. The principal proteid in milk, called "caseinogen," is precipitable by certain neutral salts, or by acetic acid, and may be most satisfactorily prepared free from impurities by a combination of these two methods.
2. The term "casein" should be restricted to the curd formed from caseinogen by the action of rennet.
3. In the classification of proteids, casein should be grouped with other insoluble proteids like fibrin and gluten, formed by ferment activity from pre-existing more soluble proteids.
4. Caseinogen should be included in a new group made to include it and whey proteid. These proteids are very similar to the globulins, the chief difference being that their solutions are not coagulated by heat like the globulins, but only rendered opalescent. This opalescence, if the heating has not been continued too long, disappears on cooling.
5. Lactalbumen is very similar in its properties to serum albumen. Not only does it differ, however, from serum albumen in its specific rotatory power and elementary composition, as has previously been shown, but in its behavior on heat coagulation and in precipitability by certain neutral salts.
6. Caseinogen and lactalbumen are the only proteids contained in milk.
7. The proteid described as lactoglobulin does not exist; it is owing to the error of not recognizing that the two salts,—sodium

chloride and magnesium sulphate,—when both present to saturation, precipitate albumen, that this proteid has been supposed to exist.

8. The proteids variously called lactoprotein, peptone, and hemi-albumose do not exist in milk. This mistake has arisen from faulty methods of analysis.

9. When milk turns sour, owing to the lactic acid fermentation, primary proteoses, chiefly protoproteose, are developed.

10. The proteid called whey proteid, which is formed during the rennet fermentation, is not of the peptone or proteose class, but should be included with caseinogen in a new class of proteids allied to the globulins.

—MM. PORÁK and BERNHEIM (*Bull. et Mém. de la Soc. Obstét. et Gynéc. de Paris*, No. 4, April, 1891) describe a case where a woman was delivered at the eighth month of a sickly female child. There was hydramnios, and over six pints of fluid came away during labor. There were two small fibrous deposits in the placenta. On the first day the child vomited dark matter, each attack of vomiting coming on about three-quarters of an hour after suckling. On the third day, as no meconium had passed, imperforate rectum was suspected; but a sound could be passed for over two inches up the anus. An enema was given, and a little meconium came away; but the vomiting continued, and the infant died on the fifth day. The stomach was found much dilated; the lower part of the large intestine was full of meconium, but the remainder of the intestinal canal was like a little packet of worms. The stomach communicated by a contracted orifice, apparently the pylorus, with a blind pouch which had no connection of any kind with the rest of the intestine, which terminated above in a blind extremity close to the pancreas, which opened into it. In a similar case reported by Crooks in 1828, the pancreatic duct opened into the pouch connected with the stomach. Luton described, in 1855, a third case where that pouch communicated with the blind end of the intestine by a ligament. There was a similar breach of continuity between the large and small intestine. No trace of peritonitic bands could be seen in Drs. Porák and Bernheim's case.—*Brit. Med. Jour.*

—Dr Chas. P. Noble, in a paper before the Philadelphia Obstetrical Society, presents the following conclusions on the dangers of leaving the products of inflammation in the female pelvis.

1. All cases of pyo-salpinx, abscess of the ovary, hæmato-salpinx, and hydro-salpinx demand operation, unless contraindicated by grave organic disease of the vital organs. The diseased organs should be removed. When gonorrhœa is the cause of the disease, the operation should be bilateral, even if one of the tubes is healthy. Operation is demanded because these conditions render the uterine appendages functionally useless, destroy health, and threaten life.

2. All cases of occluded, adherent fallopian tubes demand operation on practically the same grounds. In these cases the probability of death is less, but of invalidism equally great. The earlier the operation the greater the prospect of a cure.

3. All cases of true pelvic abscess demand operation.

4. Certain cases of chronic ovaritis and of partial development of the sexual organs demand operation—where health is seriously impaired and medical treatment, continued over one or more years, has failed.

—Dr. H. C. Coe sums up a paper on Adenoma Uteri as follows : “ Benignant adenoma ” is a misnomer. There is only one variety of true adenoma of the corpus uteri, and that is both clinically and anatomically malignant.

Adenoma uteri is not, at the outset, identical with adeno-carcinoma, but is to be regarded as the initial stage of the latter. Its malignancy is shown by its early recurrence after removal with the sharp curette.

The symptoms of adenoma are less clearly defined than those of carcinoma, being usually slight irregular hæmorrhages, and pelvic pains extending over a long period, without cachexia and offensive discharges.

Palliative treatment is worse than useless. Total extirpation promises a radical cure if performed early, or during the pre-cancerous stage.

—Prof. G. Somma and Prof. Fede presented to the Italian Pædiatric Congress a paper on Infective Splenic Anæmia in children, in which the following conclusions were drawn :

1. Infective splenic anæmia, or splenic pseudo-leucæmia, is a disease of childhood more frequently appearing than is generally believed. Adults are not entirely immune, but children in the first years of life are attacked, as a rule.

2. It was unknown, or not recognized, by clinicians up to very recently, and has been placed in modern pathology chiefly by the studies of Antonio Cardarelli, Luigi Somma, and Francesco Fede.

3. It is characterized by a classic and distinct form of grave and progressive anæmia, associated with a progressive and chronic hypertrophy of the spleen, unlike that of any other disease.

4. Clinically, it is marked by a complicated train of pathogenic and accidental symptoms. The former are found in every form of the disease; the latter are complementary, but may be absent.

5. Its evolution is marked by three characteristic and distinguishing stages: the prodromal, the developmental or stationary, and the cachectic stages.

6. Three principal forms have been observed, namely: the chronic febrile form, the chronic afebrile, or the chronic form with recurrent febrile attacks.

7. The pathology of the disease is, up to the present time, unknown. Yet, from modern experimental investigations, it seems that the pathogenic cause of the affection is a micro-organism which, introduced into the organism, finds a suitable soil in the spleen, and thence gaining entrance into the circulation, finally produces that multitude of anatomical and functional alterations which go to make up the clinical picture.

8. It runs a decidedly chronic course, with a duration varying between eight months and three years, yet cases are not wanting where it has extended indefinitely into adult age.

9. The disease may also terminate in three ways, namely: in death, which is, perhaps, the most frequent termination of all; by transition into the chronic and protracted state, which may be prolonged into adult age; or, finally, by complete cure, which is, however, deplorably rare.

10. The prognosis, therefore, is most unfavorable, and treatment is confined to the symptoms. The advisability of splenectomy is still a disputed point. The first stage, should, however, be

chosen, if the operation be performed, in order to prevent with greater probability the fatal termination of such a grave operation. —*Annals of Gyn.*

—As the complication of pregnancy and labor by cancer is so rare and its treatment so unsatisfactory, the two cases reported by Sutugin (*Zeitschrift für Geburtshülfe und Gynakologie*, Band xix., Ht. 1, 1890) are not without interest. Winckel has met with eight cases in fifteen thousand labors; Stratz, twelve in seventeen thousand nine hundred, and Sutugin, two in nine thousand. Both patients of the latter had reached the end of pregnancy; the children were living, and the disease of the cervix and adjacent tissue was so far advanced that radical treatment or delivery *per vias naturales* was impossible. The Porro operation was performed in one case, the patient dying forty-two days after operation from gangrene of the lungs; the child lived. In the second case the Porro-Müller was selected; the patient lived eight days, and the child died two months later from inflammation of the lungs. Sutugin corroborates the belief of many observers that, under the influence of pregnancy and the puerperium, the destructive character of the cancer is intensified; that it rapidly involves the mucosa of the body of the uterus, and thus so frequently causes premature expulsion of the product of conception. Lenees places the proportion of the latter at forty per cent.; Cohnstein, at twenty-nine per cent. When pregnancy reaches full term, the prognosis for the mother is very unfavorable; only forty-three per cent. live through the puerperium (Cohnstein). Of one hundred and eighty mothers seventy-two died, thirteen undelivered. The child's life is also in the greatest danger. In but thirty-three and three-tenths per cent. of all cases are children born alive (Cohnstein). When premature labor occurs, forty-two and eight-tenths per cent. of the children are born dead.

In view of these most unfavorable results for both mother and child, Sutugin believes that the operative treatment of cancer complicating pregnancy should be of the most energetic character. The modern favorable results of total extirpation of carcinoma teach us that this operation should be performed in the first months of gestation regardless of the pregnancy. The successful cases of Landaw, Kaltenbach, and Hofmeir demonstrate this.

When gestation has reached the fifth or sixth month, and extirpation is yet possible, he approves Freund's operation, modified by Zweifel, *i. e.*, a Porro followed by extirpation of the remaining cervix through the vagina after the abdominal incision is closed. This operation, more than any other, prevents infection of the peritoneal cavity. Evacuation of the diseased uterus, and subsequent extirpation, are to be employed only when the diseased process has not extended to the surrounding tissue. When such has occurred, induction of abortion, or premature labor, is contraindicated on account of the probability of sepsis. Only to the end of the fourth month of pregnancy can preparatory emptying of the uterus be advantageous, since it debars laparotomy and its attendant dangers. When pregnancy has reached term, and the cancerous disease is so widespread as to exclude all hope of complete removal, then Cæsarean section must be considered. Deep incisions of the cervix and delivery by version or with forceps are to be used only in selected cases, on account of the bad results of spontaneous labor.

Of twelve cases of Cæsarean section (ten were by the old method, and in two the uterus was stitched), four mothers survived the operation, and two children were extracted dead (Hermann). The Säger operation has been done in six cases; three mothers and all the children remain living. In all the eighteen cases, as the result of the operation, eleven mothers died, and two children were extracted dead. Cæsarean section and removal of the body of the uterus have been done successfully twice by Leopold. Two fatal cases are reported in Russia. Sutugin's two cases were successful so far as the operation was concerned. Most authors favor Cæsarean section. Winckel prefers, when it is at all possible, to deliver the child by the natural passages, by inducing premature labor, incising cervix, and resorting to forceps or version, or even craniotomy on the living child. Sutugin, from his studies and experience, agrees with Fehling that abortion, premature labor, or craniotomy should be rejected in favor of the Porro-Cæsarean section. Where the child dies before the beginning of labor, and the pelvic structures are much involved, he advocates the Porro. In one case, in which the Porro was not performed because the child had died, the mother died undelivered

(Oldham), and many deaths occurring soon after labor are reported. The sufferings of the mother when the cervix is badly deformed and the child considerably developed, in addition to the above noted dangers, make it not only justifiable but humane to do the Cæsarean section, even when the child is dead.—*University Med. Magazine.*

—Dr. Pierce in obstinate vomiting of pregnancy where the stomach would tolerate scarcely a teaspoonful of water, has found Bovinine to be a food that would touch over the reflex irritability. It is first diluted with water; afterwards milk is gradually added until the Bovinine can be dispensed with.

● GYNECIC ETCHINGS. ●

—Remy (*Archives de Tocologie et de Gynecologie*, February, 1891) reports two cases of inversion of the uterus, each of special interest and each of important bearing on the causation of this accident. The first was that of a primipara who was delivered by a midwife. The method of removing the placenta by traction upon the cord in the axis of the inlet with one hand, and compression of the fundus with the other, was employed. Palpation, in order to determine the retraction of the uterus, failed to reveal the organ in its proper position in the pelvis. Suspecting hæmorrhage, she made an internal examination and discovered, within the vulva, a tumor which completely filled the vagina. The writer, on his arrival, found an inversion of the second degree. After an unsuccessful attempt at reduction by grasping the tumor in one hand and making compression with his fingers at the level of the pedicle, while he made counterpressure from without, he effected a reposition by pushing against the body of the uterus with the convex, dorsal surface of the fingers, slightly flexed, of one hand, and at the same time making counterpressure with the other. When he had replaced the uterus he allowed his fingers to remain in the cavity, in order to excite contraction; and after giving an antiseptic irrigation he delivered the case over to the former attendant.

Inasmuch as there had been no adherence of the placenta and no violent traction, he concludes that the accident must have been due to some special cause. To explain this, he alludes to the important factor in uterine retraction, namely, the contraction of the uterine surface at the site of the placenta, coincident with that of the rest of the uterus, in order to fill the void created by the detachment of the after-birth, and shows how, in this case, the absence of this factor played an important part in the inversion. The placental site, in this case failing to contract, became inverted by the effect of the removal of the placenta, which acted like the piston of a pump ; or, in other words, the abdominal pressure forced the lax uterine wall into the retroplacental space ; the conservative influence, in such a condition, exerted by the resistance of the clots which accumulate behind the placenta, proving ineffectual.

The second case is that of a young woman, who, after her second confinement, which was normal in every respect, upon leaving her bed, suffered from a severe hæmorrhage, which was repeated after a few days without apparent cause. In both instances hypodermic injections of ergotine were used successfully to control the hæmorrhage. The writer, upon examination some days later, discovered a friable tumor occupying the vagina just within the introitus. Owing to the consistence of the mass and the offensive odor of the discharge, he concluded that he had to do with a retained portion of the placenta. The attempt to remove the mass with a volsella gave rise to profuse hæmorrhage. After a more careful bimanual examination, he discovered an inversion of the second degree. This he treated by means of continuous pressure by cotton tampons covered with iodoform gauze. He explains this production of inversion, so late in the puerperal state, as follows : There was, in all probability, a retention of a small portion of the placenta which caused a local congestion at this point, under the influence of which the uterine tissues at the insertion of the placental polypus, became gradually more and more yielding until the contraction of the rest of the organ forced it through the partially dilated os.—*University Med. Magazine.*

—Dr. Andrew F. Currier presents the following rules as to the management of the omentum in abdominal operations :

1. It should be preserved as nearly intact as the conditions of each individual case will allow.

2. Great care should be exercised to avoid wounding it in making the abdominal incision, or bruising or lacerating it at subsequent stages of an operation.

3. Badly injured portions should be resected with all due precautions, also such portions as cannot be so replaced as to occupy their original position and perform their normal function.

4. Before closing the abdominal wound it should be carefully and evenly replaced as the natural covering of the intestine.

In the large class of cases in which the lesions demanding surgical interference are located entirely, or to a great extent, in the pelvis, the omentum is very frequently a source of no particular trouble during an operation. If the incision is a short one with its lower limit near the symphysis pubis, and the omentum is not voluminous or adherent, it may not be seen at all, and we are conscious of its presence only as it becomes entangled about the fingers when they are passed downward into the pelvis. The operation may be completed and the incision closed without a thought or an intimation of the presence of an omentum.

If an abdominal sponge is used to absorb the leakage from divided vessels and protect the intestines it must not be forgotten that as the sponge presses the latter upward it presses the omentum upward also, and when the sponge is withdrawn the omentum may still remain displaced, or gathered into a lump, or otherwise abnormally disposed so that it can no longer perform its proper function.

—Dr. Clouston describes chorea as a neurosis development, classing it with some forms of epilepsy, spasmodic asthma, somnambulism, migraine, and certain eye diseases. All these affections are incidental to the intermediate period of life, between the periods of greatest brain growth and of highest functional advance. Looking to the physiological and psychological development of the brain, he calls this period that of the co-ordination of motion and emotion. Sensation, special and common, and its organs have been developed; muscular co-ordination has progressed far; and many of the mental faculties—such as memory, fancy, and emotion—have acquired some strength; but muscular action has not been fully co-ordinated with feeling, and this is the

period of life when that co-ordination takes place. The inco-ordinated movements of chorea show themselves first in the mind-muscles of the face—those of expression. Mental and emotional impressions are very potent causes of the disease. It is a disease, like hysteria, of towns and town-life or of civilized races. In the author's opinion, the most reasonable hypothesis as to its seat is that the basal ganglia are at fault, and just at the time when the co-ordination of their motor functions with mind is being perfected, and when their full use as motor servants to the rapidly developing higher mental centers in the cortex is being completed.

Dr. Clouston admits that the disease has a close relation to the rheumatic diathesis, and in certain cases to acute rheumatism. He believes, however, that there is always a neurotic heredity even in the rheumatic cases; a combined rheumatic and neurotic heredity seems its very strongest predisposing cause. It is almost always accompanied by mental disturbances of a mild kind, consisting of inco-ordinated mental action, derangements of feeling, and often hallucinations of hearing. It is usually a transitory neurosis, and, as boldly development proceeds, it tends to terminate naturally in recovery.

The author states that he constantly meets with chorea in the children of his insane patients, in the children of dipsomaniacs, and in those of epileptics. Its relation to epilepsy is very close. He cites the case of a girl who had convulsions during the first dentition, chorea at eleven, and hysteria soon after, but who at eighteen seemed perfectly well in nutrition, nerves, and mind, having, through the process of further development alone, got over all tendency to these neuroses of early development; she had literally "outgrown" them. Other cases are given illustrating the developmental character of chorea and its relationship to other neuroses of the period of childhood.—*N. Y. Med. Jour.*

—Dr. Garrigues (*Archiv. f. Gynäkol.*) relates two cases of metritis dissecans. Höchstենbach, not long ago, stated that but twelve cases had been recorded. Dr. Garrigues adds two to a series of six published in the *New York Medical Journal*, vol. xxxvi, 1882, p. 537. He makes out fourteen genuine recorded cases in all. He particularly dwells on the fact that all occurred in the first week after labor. In all, thick and broad pieces of the muscular coat of the uterus exfoliated. In one instance the

exfoliation extended through the whole thickness of the uterus, including the serous coat. Of the new cases, the first occurred in a woman aged twenty-eight; prolapse of the funis took place and the forceps had to be used. Puerperal diphtheria followed, diphtheritic ulcers forming in the vagina. Douches of boracic acid solution and other remedies brought the patient out of a desperate condition. On the twentieth day, when the patient was convalescent, something was seen hanging from the vulva after the use of the douche. It was found to proceed from the cervix, and was easily extracted with a pair of dressing forceps. It proved to be a piece of the uterine muscular tissue, $2\frac{3}{4}$ inches long, and three-quarters of an inch thick in the middle, but rather thinner at the edges. After the discharge of this fragment, the patient made a rapid recovery. The second patient was twenty-three and labor was normal. On the second day the fundus was tender to pressure, the lochia rather scanty and fœtid. There had been slight laceration of the perineum, which was promptly painted with tincture of iodine; by the second day an ulcer spread an inch upward from the perineum, over the vaginal wall. On the third day abdominal pains set in, with tenderness in the hypogastrium and loins. During the next few days the patient got worse, the fundus rose nearly four inches above the pubes, and was very tender. Salicylate of soda in 30-grain doses was given. On the sixth day the patient was collapsed, the temperature fell to 96.5° , the pulse to 80. Alcohol was given. Fever set in again, and ceased about the twelfth day. The patient remained very feeble for weeks. She did not rise from her bed till the thirty-first day. On the thirty-six a substance fell, painlessly, out of the vagina, as she lay in bed. She left hospital, well, at the end of seven weeks after labor. The discharged piece of uterine wall was over three inches long and one inch and a half broad. This metritis dissecans is always due to infection. Micrococci have been detected by Grammatikati and others. Dr. Garrigues believes that in pre-Listerian days such cases would have developed into Boër's putrescentia uteri. His own eight cases of metritis dissecans occurred within eighteen months, at a time when he had reason to believe that the antiseptic regulations of his maternity were not properly carried out. As to allied diseases, Dr. Garrigues has seen a fatal case of gangrena uteri

partialis, with a characteristic yellow layer of demarcation. The patient was thirty-eight, and died a week after labor; the disease seemed purely diphtheritic. The uterus reached high above the pubes and the omentum adhered to it. Kubassow's endometritis dissecans is a disease unconnected with childbed: it is the endometrium that is shed, with but little of the muscular coat of the uterus. Markonnet's peri-vaginitis phlegmonosa dissecans is also non-puerperal; a portion of the muscular coat of the uterus came away in that observer's cases, but only from the vaginal part of the cervix in connection with the adjacent inflamed vaginal tissues.—*Brit. Med. Jour.*

—When uncomplicated by tubal diseases, chronic ovaritis produces invalidism, but never death, unless indirectly. The removal of such ovaries is unjustifiable unless prolonged, well-directed treatment has been employed without success, and the health of the individual case is seriously compromised by the condition.

—Gilles de la Tourette and Cathelineau (*Le Progrès Médical*, February 14, 1891) give a detailed report of their researches in hysteria, in the course of their general investigation of the condition of the nutrition in hysteria. They reach the following conclusions: 1. In cases of normal hysteria, the same solution of the continuity of the skin as in sound individuals gives issue only to a quantity of blood about one-third inferior to the normal. - 2. That except in cases of anæmia and chlorosis, the quantities of hemoglobin, urea, and glycogen are in normal proportions. These results confirm what these authors have noted before, that the nutrition does not seem to be disturbed in normal hysteria.

—*The Journal de Médecine de Paris*, for June 21, refers briefly to a case originally reported by J. Berenyi in the *Therapeutische Monatshefte*. An infant eight days old had suffered from trismus for three days. It had five attacks in five hours. Berenyi prescribed sulphonal by the mouth and by the rectum, in doses of three grains. The attacks diminished in intensity and in frequency immediately after the institution of the treatment. Recovery was complete in six days. During this period the child had taken,

in all, a hundred and fifty grains of sulphonal without the occurrence of somnolence or any other unpleasant secondary symptom.

—*N. Y. Med. Jour.*

—One great fact which stares us in the face in connection with the abuse of minor uterine surgery and of local applications to the cervix, is that most of the troubles which we have been in the habit of considering as situated in the uterus, are not in that organ at all. Thus with one sweep we are able to dispose of a large proportion of the so-called uterine diseases. It is then manifestly improper and dangerous to direct treatment to the uterus, when that organ is perfectly healthy and the trouble is situated in the neighboring tissues—most probably of an inflammatory nature. In a large proportion of the remaining so-called uterine diseases the womb itself is undoubtedly affected, but the lesion in the uterus is only secondary to a lesion in the uterine appendages, or if it was the seat of the primary disease, its continuance is surely due to the inflammatory condition of the contiguous organs. Here again, a treatment directed against the uterus itself is both irrational and dangerous. This leaves us but a comparatively small number of cases of pure uterine disease; such is the true situation. Uterine disease, such as metritis, endometritis, pathological displacements, etc., uncomplicated by other and more serious troubles, is the exception rather than the rule.

—According to Carl H. Von Klein (*Journal of the American Medical Association*, April 18, 1891), the most difficult cases the laryngologist has to contend with are diseases of the throat caused by disturbance of the ovaries. It is a common thing to meet with cases of acute inflammation of the tonsils, larynx, pharynx, and fauces in females during their menstrual period. He has observed the voice in many professional choir singers, who have applied to him for treatment during the menstrual period, defective in gravity, force, and timbre, producing in many cases a husky sound, as of a low, masculine order. It is a known fact that prima donnas try to avoid engagements during their expected period. A menstruate can be detected nine times out of ten by the low tone of her voice. In many cases of ovarian disturbance,

enlargement and hypertrophy of the tonsil, and of the soft palate are observed, hence the laryngologist oftentimes can accomplish but very little without the assistance of a competent gynæcologist.

—In the *Edinburgh Medical Journal* Dr. Clouston devotes considerable time to the consideration of the ætiological relations of traumatism to idiocy. Most authors agree that certain cases of idiocy are to be attributed to injury. It is certainly a fact that parents are prone to find a cause for any defect in some accident, bodily or mental, resolutely shutting their eyes to manifest hereditary weakness. According to Dr. Ireland, the injuries to be considered are those inflicted by attempts to produce abortion as well as injuries during labor caused by a deformed pelvis or the use of the forceps. We also have to deal with concussion and compression and hæmorrhage from the meninges, as well as destruction of the gray or the white matters of the brain. What seems like a slight injury is sometimes followed by most serious results, but hereditary predisposition has no doubt much to do with this. Traumatism is thus reduced to a rare exciting cause, hereditary being actually the real cause. While it has been asserted that the use of the obstetrical forceps is a common cause of idiocy, Dr. Down has shown that in only three per cent. of the births of idiots was the forceps employed. Dr. Mitchell, after thorough investigation into the histories of a very large number of idiots and imbeciles, came to the conclusion that tedious labor and the use of the forceps were causes of those conditions. He also pointed out the fact that a large proportion of idiots were first-born children, and is inclined to attribute many cases to pressure on the head during prolonged labor. In this belief Dr. Clouston is not wholly willing to coincide. There are certain cases, however, where traumatism must be assigned as the exciting cause of the arrest of brain development. This is readily understood when the injury has caused some gross lesion of the brain, such as might occur from an apoplectic clot. It is not so apparent why a fall or blow is sometimes followed by a change in the normal development of certain of the brain functions. In such cases the arrest is on special lines of its own, and does not follow the course taken by purely hereditary cases. It

is more limited, and does not affect the whole of the brain functions. The facial expression is apt to be better, the teeth are not affected in the same way, and the bodily movements are more natural than in the hereditary types of idiocy and imbecility.—*N. Y. Med. Journal.*

THE SOUTHERN ASSOCIATION.

The Eighth Annual Session of the Southern Homœopathic Medical Association will convene at Nashville, Tenn., on November 11, 1891, in a joint convention with the Homœopathic Medical Society of Tennessee.

Many homœopaths throughout the Northern States are aware of the active working spirit among the members of this association, and the power they are wielding for the general good of our school. Especially is this true in the Southern States, where allopathy has been so dominant heretofore. The active measures taken at Birmingham in behalf of the homœopaths in Alabama, in championing their claims for justice and equal rights, fully demonstrated the usefulness of this organization.

A most cordial welcome is extended to all the Northern homœopathic physicians to meet with us at the Nashville meeting in November and enjoy the discussions on medical and legislative topics.

Many excellent papers from practical and original thinkers will be read; we have no time for text-book articles. If you have had an interesting case and cured it, or if death ensued, write it down briefly and read it to us at Nashville.

WELLS LEFEVRE, M. D.,
Secretary.

BOOK NOTICES.

The final volume, making six in all, of Concordance Repertory, has just been issued by A. L. Chatterton & Co.

THE HOMŒOPATHIC JOURNAL OF OBSTETRICS, Gynæcology and Pædology.

A. L. CHATTERTON, EDITOR AND PUBLISHER.

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VOL. XIII.

VAGINAL HYSTERECTOMY.*

BY

GEO. T. MOSELY, M. D.,
BUFFALO, N. Y.

Of all the operations which the past few years have given to gynecological surgery, none has awakened more deserved interest among the profession than the new method of vaginal hysterectomy.

So prevalent and fatal has been that dread disease carcinoma, that the medical mind is ever on the alert to gain some point of vantage against this insidious foe.

For years have surgeons curetted, cauterized, and amputated the cervix uteri, and watched the speedy return and rapid progress of the malignant disease. Driven to desperation, the terribly fatal operations of Freund, Martin, and Schroeder have been accepted as the only alternative.

But total ablation of the uterus through the abdomen was too fatal in its results; a rapid and easy method of re-

* Read before New York State Homœopathic Medical Society, at Buffalo, September, 1891.

moving the uterus per vaginam became a necessity, and vaginal hysterectomy, with clamping the broad ligaments, appeared to fill the want.

That this method has numerous peculiar advantages must be at once apparent. The ease and rapidity of operating as compared with the old plan of tying off the broad ligaments in sections, the avoidance of abdominal section, a smaller wound, less violence done the tissues, and less shock—these are advantages enough; but when, added to these, we find a mortality of only 5 or 6 per cent., we have an operation almost ideal.

(The best statistics I have seen for a large number of cases is the report of eighty operations by Leopold of Dresden, with a mortality of 5 per cent.)

The indications for this procedure are to my mind very simple. If the cancer be limited to the uterus, and the organ can be removed through the vagina, I should operate in every case immediately the diagnosis is made. This may appear somewhat radical, but since the researches of Albert Smith, Abel, and Landau have demonstrated the existence of the so-called sarcomatous degeneration of the corporeal endometrium, in a large majority of cases of carcinoma of the cervix, I think that unless its absence can be proven, amputation of the cervix must be considered simply a temporizing method, and total ablation of the uterus offer the only hope of *cure*.

The contra-indications to the vaginal operation are first, excessive size of the uterus and immobility caused by general adhesions; second, enlarged lymphatic glands in the pelvis, and nodular deposits in the broad and utero-sacral ligaments, particularly the latter. A simple thickening of the broad ligaments, with consequent fixation of the uterus, need not be considered a contra-indication, as in many cases it is purely inflammatory, and antedated the malignant deposit.

If, however, the swelling be nodular, and the glands infil-

trated, the only radical operation consists in complete removal of all affected tissues through Kraske's sacral incision, after excision of that bone.

The difficulties attending a simple ordinary vaginal hysterectomy are few and easily overcome; but there may arise conditions which make its completion almost impossible, or defeat the object for which it was undertaken. For example, in many patients we can be morally certain that the disease is limited to the tissue of the uterus, but the border line is so ill defined that it is often a matter of serious doubt whether there may not be a beginning secondary deposit in the appendages or vaginal septum. And if but a single cancer cell be present in the surrounding tissues, removal of the uterus will of course not obliterate the disease, nor save the life of its victim.

When there is any doubt as to the complete localization of the carcinoma, two facts must be borne in mind. First, that the tendency of cancer of the cervix is always to spread primarily toward the vagina and parametrium; and second, that even where no induration can be felt in the broad ligaments or vaginal walls, a few morbid cells may have been deposited in these localities.

The practical deduction follows: if the disease be of large extent and long duration, protection against recurrence demands the removal of a ring of vaginal tissue surrounding the cervix, and as much of the broad ligaments as can be taken away with the uterus. This procedure can do no harm, and its omission may permit the development of a previously imperceptible secondary deposit.

During the past year we have performed five of these operations, with one fatality. In one patient, who made a rapid recovery from the operation, there has been a recurrence of the disease; and with your permission I will detail points in these two cases, that the experience of our failure may contribute, possibly, to another's success.

Our first case was in a multipara, æt. 45, having a history

of a fall three or four months prior to coming under observation, followed by persistent metrorrhagia. Examination showed the cervix a large, soft granular mass, bleeding on the slightest touch, broad ligaments thickened but not indurated or nodular, vaginal tissue apparently normal, and glands not enlarged. A portion of the growth was scraped off for microscopical examination, the diagnosis confirmed, and the following day we made a high conical amputation of the cervix. This was mistake number one, for in a week's time there was a return of the disease, growing with the most frightful rapidity I ever witnessed. Recognizing the futility of any other procedure, vaginal hysterectomy was decided upon and done immediately. No implication of the vagina being discernable, the usual incisions were made through the vaginal walls close to the cervix, the ligaments seized with Polk's clamps, and the uterus cut away with scissors. The patient made a rapid recovery and everything went well for several weeks, when suddenly a spot of induration appeared in the vaginal roof at some distance from the cicatrix marking the former cervical junction, and broke down rapidly, leaving a vesico-vaginal fistula. Some weeks later a corresponding spot appeared on the posterior wall, perforating into the rectum. The patient is now, after the lapse of a year, passing urine and fæces per vaginam, and though in fair physical condition, yet with a slowly spreading carcinoma from which there is but one avenue of relief.

If, now, we had saved the week's time wasted in amputating the cervix, and removed a wide collar of vaginal tissue surrounding the cervix, at the time the uterus was extirpated, possibly the result might have been different. At any rate, with this experience I should never again hesitate to remove a broad margin of vaginal tissue in a case of long standing, even though no deposit in the vaginal walls could be demonstrated.

The other, our only fatal case, was one of so-called adenomata maligna, in a woman of fifty, nullipara, with con-

tracted pelvis, cachectic, feeble, exhausted by months of suffering and the effects of the morphine habit. The uterus was much enlarged and the curette brought away masses of broken-down glandular tissue from the uterine cavity, with a purulent, horribly offensive discharge.

We attempted vaginal hysterectomy, but found, on entering the peritoneal cavity, that the uterus was elongated much beyond our expectations, and that it was absolutely impossible to reach the upper border of the broad ligaments.

Even after drawing them down with a hook to the fullest extent, they were still so wide that it was impossible to include their entire breadth in the grasp of the clamp. (Owing also to the small size of the pelvic outlet it was very difficult to manipulate with the guiding finger and both blades of the clamp in the vagina at the same time.) In this emergency the ligaments were perforated above their center, the lower segments clamped, a laparotomy rapidly done, the upper segments ligated, and the uterus removed.

The shock was intense, and, in her condition of lowered vitality, proved too much for the patient, and she succumbed on the third day.

I suppose this should not be recorded as a fatality from vaginal hysterectomy, as it was eventually done by the combined method—an operation having a much higher death rate, even in the hands of its distinguished originator, Dr. Martin, of Berlin.

It might justly be claimed that this was not a case for the vaginal operation; but the exact state of affairs was not even surmised by the several physicians who examined her; and I know of a similar result occurring in the practice of a colleague, where simply an excess of bodily fat made it impossible for him to reach over the broad ligaments and remove the uterus through the vagina. In this

case also the patient did not survive the laparotomy, or mixed operation.

In anticipation of another similar experience, I have devised a clamp, or rather modified an old one, so that it can be applied in any case no matter how difficult of access the ligaments may be.

This instrument has, on the lower or posterior blade, a hooked extremity, with a conical cavity in the hook terminating in a smaller orifice into which the end of the upper blade fits and locks.

The posterior blade is first passed behind the broad ligament and hooked over its upper edge. The anterior blade is then inserted in front of the ligament and passed up until its pointed extremity is received into the wide conical opening in the hook of the other blade.

Pushing it home, the end fits accurately into the opening made to receive it, and locks by a simple notch on its upper surface.

The blades are approximated by a screw and nut at the end of the handles, and, by sliding a chisel-shaped knife along grooves in the sides of the clamp, the uterus is cut away at a single stroke.

The advantages of this lock are that it can be locked in the dark without the finger as a guide; for as soon as the ends of the blades touch, the small upper blade slips into the wide-open mouth of the other; the locking can be started with the blades at any angle or parallel; and the lock cannot be fouled by a fold of membrane or adhesion, for by pushing both blades upward together the lock can be carried beyond such obstruction. The advantage of the hooked extremity is the extreme facility with which it can be applied to the broad ligament without a guide. So in extremely fleshy persons, in those having long, narrow vaginas, where the uterus cannot be drawn down, where the ligaments are broadened, in fact in any case where the finger cannot reach the upper border of the ligament, this blade

can be slid up along its posterior surface and hooked over it. With this and the side of the uterus as a guide the upper blade is easily applied, the instrument locked in an instant, and the difficult part of the operation is done.

To those who have not performed this operation, the style of clamp may seem a small matter, but to my surgical brethren who have felt the minutes steal away while they vainly struggled to apply and lock a clamp in the far away recesses of a small pelvis, a device to save time and facilitate this often difficult procedure may be acceptable.

THE SUPERVISION OF NORMAL PARTURITION.*

BY

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Old things are passed away, all things are become new.

These words seem exactly to describe the revolution that has come about in obstetrics, and may well introduce the subject, and as disciples of Hahnemann are peculiarly appropriate to our method of treatment.

But not only has the medicinal treatment changed, but all the surroundings of patients are now altered. Hygiene and sanitation have explained much; antiseptic nursing has done more, till the mortality of the puerperal state is reduced almost to zero. Each branch of our profession is so intimately related to the others, that discoveries in one directly or indirectly benefit all.

Homœopathy, which has done so much for us in other special departments, has not been behindhand in obstetrics, and there is every reason to believe will do much more for us in proportion as we have means and opportunities for its

* Read at the British Homœopathic Congress, July. 1891.

study. But as in the case of surgery, obstetrics must always to a large extent depend on the *tactus eruditus* of the physician, and also on the thorough and conscientious carrying out of antiseptics: and it is only when these and all other considerations are taken into account that are likely to bear on the welfare of our patients, that we can expect the best results from homœopathy. Indeed, it is not giving homœopathy a fair chance to disregard these very important adjuvants, and when this is done we must expect disappointment.

But I shall endeavor to limit my remarks to that portion of my subject which I have selected, as being one which will be of interest to the majority—the “Supervision of normal parturition.”

Latterly it has been my habit to prepare the patient for parturition by a course of medicine commenced about the sixth or seventh month of pregnancy and continued during the remaining period until delivery.

I give actæa rac. 1x, gtt.j. dose every morning for one week, then caulophyllum 1x, gtt.j. dose every morning for the next week, and then back again to actæa, and continue this alternation of the remedies. So far as I have observed the effect has been to render labor easier and, I think, more rapid. In some cases I have reason to believe the labor has been induced a week or ten days before term, and if this be so, although it is always difficult to be sure of these dates, it may explain the greater ease and rapidity of the labor.

W. H. Rean, in a paper read before the British Homœopathic Society in 1884, speaks in the highest terms of arnica given in the last three weeks of pregnancy. He gives the first decimal in half-drop doses every morning. He says, “I have tried it in a large number of cases, and I can say with confidence that in no single instance have I been disappointed in it. Two most important results may be confidently expected from its use, supposing the condition of the mother and the fetus be normal. It materially reduces

each of the three stages of labor and marvelously minimizes the pain."

He quotes three cases, one a girl of fourteen, a second who had not borne a child for fifteen years, and the third, a primipara of forty-three, all of whom had very easy times.

He uses the tincture prepared from *fresh plants* only, the ordinary tincture having failed. In conclusion, he says, "arnica possesses a power over the uterus the value of which cannot be easily estimated. I use it now in nearly all my cases, and the larger my experience the more fully I am convinced that the obstetric practitioner has at his command a drug by the side of which nearly all other medicines sink into insignificance." A drug so highly eulogized cannot fail to commend itself.

During the early stage of parturition *ignatia ix.* suits well the excitable state so commonly resulting from pain and loss of rest.

As I wish this paper to be as practical as possible, and to give a true and exact picture of the modern lying-in room, it will be well to name the requisites for the comfort and welfare of all concerned.

In the first place a *good nurse* is essential: one who has had a scientific training (if I may use the word in speaking of a nurse) as to the nature of septic diseases and their prevention. Without such a training a nurse cannot be expected to carry out the minute details of aseptic nursing: indeed, it would be useless to expect anyone, without understanding the *rationale*, to do so. For the welfare of the patient a good nurse is as essential as a good doctor, and a careless nurse may thwart all the care and skill of the physician, and may be the means of bringing him into disrepute. This point cannot be too strongly insisted on.

It is my habit to place in the hands of the nurse a card of "Rules for the Use of Monthly Nurses."* These are as follows:

* Modified from Playfair.

1. The nurse will have charge of two bottles, labeled No. 1 and No. 2. No. 1, corrosive sublimate in strong solution (308 grains in 4 ozs. glycerine); No. 2, tincture of iodine, pure; also a pot of eucalyptus vaseline (1 in 8).

2. A small basin containing a (1-1000) solution of corrosive sublimate, made by adding one teaspoonful from bottle No. 1 to one pint of water, must always stand at the bedside, and the nurse, after washing her hands with soap and nail-brush, must well rinse the hands in this before touching the patient in the neighborhood of the genital organs, whether for washing or any other purpose, before or during labor, and for a week after delivery.

3. All sponges, vaginal and enema syringes, catheters, as well as bed-pans or slippers, must be well rinsed in a similar solution of (1-1000) corrosive sublimate before being used.

4. The eucalyptus vaseline is to be used to grease all vaginal tubes, catheters, and enema tubes before being used.

5. Twice a day the vagina is to be syringed with two pints of warm water (temp. 100° F.), to which two teaspoonfuls of tincture of iodine (bottle No. 2) have been added. The external genital organs must be sponged with corrosive sublimate solution (1-1000).

6. All soiled linen, sheets, diapers, etc., should be at once removed from the room.

N.B. Hartman's sanitary towels are strongly recommended, and also a sanitary sheet for the accouchment.

Instead of the strong solution of corrosive sublimate No. 1, I now use a more convenient preparation of corrosive sub. tablets—one tablet being added to a pint of water makes a solution of 1-1000. They are very portable, and keep well. Or powders composed of corrosive sub. gr. x, tartaric acid grs. 50, and $\frac{1}{2}$ gr. carmine may be used, as recommended by Dr. Cullingworth, one powder making one pint of 1-1000 solution of perchloride.

Hartman's sanitary sheets are invaluable. They should

be placed before the fire before use, when they swell up and become soft and downy; one is generally sufficient. They are very absorbent and cleanly.

The nurse's dress should be of a white glazed or starched material, and of course be put on fresh for each case. Attention to the hands and nails may be thought superfluous, but success can only be insured by attention to details, and the nurse (and it need not be said the physician) should be in the constant habit of using the nail-brush. It is well after washing the hands in hot water, after drying them, to well rub in lanoline and calendula ointment. This should be a matter of *habit*, especially as most antiseptic solutions are somewhat irritating to the skin if the hands are often in them, especially in cold weather. Rule 2 applies equally to physician and nurse. At a well known lying-in institution not far from here, at one time the enthusiasm for antiseptic midwifery was carried to such a degree that it was the practice to deliver the child in a cloud of carbolic spray. This we know now to be superfluous, but still the spirit of the practice was good, and it would be well if all who practice obstetrics constantly kept the subject of antiseptics before them. It is only by scrupulously attending to all the details of antiseptic nursing that immunity from puerperal fever can be insured, for we now know this to be an entirely preventible disease, and here we have the explanation why some men constantly meet with this disease in their practice, while others never see it.

During the first stage of labor I have had the best results from chloral hydrate in very tangible doses, following Playfair's recommendation, giving $\frac{3}{4}$ iss of the syrup=gr. xv. every 20 minutes for three doses; it lessens the pain, produces a drowsy state, and often the patient sleeps between the pains, only waking up when they are severe. A fourth dose may be given if necessary. Good progress is made during this drowsy condition, and the os, which perhaps at first seemed rigid, goes on dilating. The chloral

possesses another advantage, for, should an anæsthetic be required during subsequent stages, less is required than if no chloral has been given. This may or may not be due to decomposition of the chloral in the blood giving off chloroform, as Oscar Liebreich believed.

Dr. Edward Janney, of Baltimore, speaks well of gelsemium 2x in rigidity of the os.

Another plan which I have found very useful, and which may be used in conjunction with the above, is a hot vaginal douche, temp. from 100° – 105° and rendered antiseptic by creolin or sanitas. The stream is directed against the resistant os, and the douche may be repeated if necessary.

As soon as the os is fully dilated or dilatable the membranes should be ruptured if they have not already ruptured spontaneously. Nothing is gained by waiting if the fact is fully determined that the os is quite relaxed, indeed the membranes are occasionally so tough that great delay is caused by waiting for their spontaneous rupture.

The method I adopt for this purpose is extremely simple, and much safer than the use of hair-pins, quill pens, etc., which are commonly resorted to. The nail of the forefinger of the right hand is notched with a penknife, and the sharp point thus produced is quite sufficient to tear through the membranes when they are rendered tense during a pain. The progress of the case is now greatly facilitated, and by the escape of the amniotic fluid the head descends into the pelvis. The chief danger of delay now is when the anterior lip of the cervix gets jammed between the pubes and the head. This can easily be avoided by pushing it up and keeping it so during one or more pains, when it recedes over the head and gives no more trouble. It is during the second and third stages of labor that the physician can be of most service; during the first stage the examinations should seldom be made.

Should the perineum be rigid it is well to let the nurse foment the parts, and freely lubricate with eucalyptus vas-

eline. During dilatation of the ostium vaginæ is the most painful period, and it is always well when this takes place slowly. The A.C.E. mixture administered at this stage, at the acme of the pains, has a most beneficial effect, and, if thought desirable, may be pushed to the production of complete anæsthesia. A mixture made by substituting Eau-de-Cologne for the alcohol is more pleasant and equally efficacious.

The various plans for supporting the perineum are fully described in the text-books, but most must be expected from fomentations and stretching and lubricating the parts. Even when all has been done, and the utmost care taken, rupture in certain cases will take place to a greater or less extent. Lateral incisions have been suggested to obviate this, but if the rent be properly sutured, union by first intention is obtained, and nothing more can be desired. The perineum should always be examined afterward to see if there is any laceration, and if there is the wound should be thoroughly cleansed from adherent clots, and the edges brought together by two or three deep sutures of silk or gut passed well through the perineal body. A dry dressing is then applied with crystallized iodoform.

It is astonishing how little pain is caused by this procedure, the parts being in a somewhat anæsthetic condition. The chief discomfort the patient suffers afterward is from having the legs tied together.

This little operation is so simple, and gives so little pain if done at once, that to omit it and leave the perineum ruptured on the chance of its reuniting can only be regarded as criminal, considering the life of subsequent misery which has by this neglect been insured for the patient.

How much of the work of the gynecologist would be prevented if this precaution were always taken! It is true that now and again we find an advocate for leaving the rupture, saying that, if united, with the next pregnancy it will tear again; this is very likely, but then it can be

united again, and between whiles the patient is perfectly sound.

Should there be great delay in the second stage, the head advancing and receding when on the perineum, the patient getting worn out and restless, I have only seen the best results from the application of the forceps. Here we have a powerful and most valuable means of controlling labor, a means which is perfectly safe, but too often neglected. There is a limit as to the time a patient should be allowed to remain in this stage, and if this limit be exceeded, subsequent convalescence is retarded, even if no worse results follow. The state of affairs is somewhat comparable to the condition which exists at the end of the first stage, where timely rupture of the membranes greatly facilitates progress, and obviates much suffering.

With the expulsion of the child our thoughts should be directed toward the state of the uterus, which should be carefully followed down by the hand, making sure that it is in a state of contraction, which state must be maintained. The hand should not be removed from the fundus now till some time after the birth of the placenta, depending on the degree of contraction and the amount of hemorrhage, which should be carefully watched.

The expulsion of the placenta should not be attempted until about twenty minutes after the birth of the child. This gives time for the closure of the sinuses. Traction on the funis is *never* necessary, and should be strictly avoided; the method of expression as described by Credé is always sufficient to force the placenta out of the uterus, and in most cases (by bearing down efforts of the patient at the same time) out of the vagina as well. Experience in the maternity department of University College Hospital convinced me, and subsequent practice has only confirmed the opinion then formed, that the often heard of "retained placenta" is extremely rare.

The method of expression consists in driving the placenta

out by *vis a tergo*. After about 20 minutes from the birth of the child, advantage is taken of a pain, when by grasping the fundus firmly and expressing in the axis of the pelvis, being helped by the bearing down efforts of the patient, the placenta is born, without the introduction of any part of the hand into the parturient canal. Should the contractions of the uterus be feeble, the hands should be placed in a jug of cold water for a few minutes, then quickly wiped and applied to the fundus. This will almost always produce a contraction. It is not necessary for the physician to keep his hand on the fundus all the time, but the nurse may from time to time relieve him of this duty, for *duty* it assuredly is, and by its observance post partum hemorrhage may be prevented.

Immediately after the expulsion of the placenta a hot calendula douche should be given, strength about 3 i to the pint, and temperature 100° to 105°. The effect of this is twofold, it is wonderfully soothing to the abraded passages, and it causes powerful contraction of the uterus, and will effectually control any hemorrhage. A medicated pessary, containing gr. v. to gr. x. iodoform, is then inserted to insure antisepsis.

The reaction at this stage is best met by hot drinks and arnica 3x, and keeping the patient warm with hot bottles. In another twenty minutes or so the binder may be applied. This is frequently too narrow, but should reach from the crest of the ilium to well below the trochanter.

It is very important that the patient should not exert herself in its application, and to avoid this it is best done by commencing its application when on her side, and having the binder rolled up as is done in changing sheets; the patient is rolled over on her back, and no lifting required.

Hitherto I have said nothing about the time-honored ergot, which has in measure become associated with the lying-in chamber. It is certainly a very powerful agent, and has often been the cause of much harm. Even among

the old-school practitioners it is almost restricted in its use to the end of the third stage of labor, indeed, one might go so far as to say it is never safe to employ it before the placenta has been delivered. I find now it is rarely necessary to use it at all, and never in the form of the liquid extract, which is a nauseating and disgusting preparation, and liable to go bad on keeping. If the labor has been carefully conducted as above described, there is very little tendency to post partum hemorrhage, the uterus having had no opportunity of relaxing. Should it occur, however, a hot vaginal douche is the most prompt means of insuring uterine contraction. At the same time I always have by me ergotine, 10 minims of which I inject into the glutei. It is a permanent solution made by Huggett & Co., and contains gr.iiij. m x. It acts more promptly than the liquid extract taken by the mouth.

By carefully adhering to the above described methods of treatment, the very best results are obtained, the labor itself is reduced in time and the pain modified, and, if desired, by pushing the anæsthetic, abolished; convalescence is also rapid and certain. The remedies at this stage vary with the symptoms; arnica 3x every few hours is best indicated immediately after delivery and for the first few days. About the third day, should there be any appreciable rise in temperature, aconite or bell. will give most relief.

I am sure the longer the patient can be persuaded to maintain the horizontal posture the better; at least a fortnight should be spent absolutely in bed, most of the third week lying on the bed or couch, and the fourth week the patient may come downstairs and finish by taking a drive.

It is always well to explain to the patient the reason for this, what to her may appear, enforced idleness. Sub-involution by these precautions is avoided, with its attendant miseries—prolapse, retroversion, flexion, etc.

In conclusion a word about the diet. The patient's appetite is always the best guide, provided there is no morbid

craving. It is always well to bear in mind that a person in bed, and doing no work, has not the appetite of one who is up and about. The old-fashioned gruel has almost ceased to be given, except, perhaps, for the first day after delivery. The feeling that the parturient woman is not an invalid, and simply passing through a series of natural events, should ever be uppermost in our thoughts and guide us in our treatment; the diet should therefore be light and easily digested, and abundant, especially the liquids. Stimulants are not necessary, but positively harmful, as they tend to produce and keep up pelvic congestion.

Discussion.—The president remarked that if it were not for the carbolic spray Dr. Roberson Day had spoken of, it would seem to him that the whole tendency of his paper would be to make them regret that they could not be born again. To be surrounded by so many scientific appliances, and to be protected with so much care from their earliest hours against the approach of germs, seemed to suggest a condition of things in which, if they could bear children themselves, they must at least long to be born.

Dr. Hawkes (Ramsgate) would like to express his very cordial thanks to Dr. Day for his most able paper. It would be exceedingly helpful, and especially to those among them who happened to have their lot cast in rather outlandish neighborhoods, where they could not readily get the help of their *confrères* who were in sympathy with them on the subject of homœopathy. He was reminded, in listening to what Dr. Day had said as to the use of drugs during the progress of pregnancy, that he had also found the drugs mentioned of very great service in the treatment of the patient during a couple of months beforehand. The results had been so marked that he had made careful notes of them in his obstetric book, and his experience was quite in accord with that of Dr. Day. He remembered having some years ago had given to him a book entitled "Parturition Without Pain," with which Dr. Day was no doubt familiar. It was a

small book, published by an American, and in it the writer advocated the great value of the dietetic treatment of the patient before confinement. Dr. Day had referred to the question of dietary afterward. He lent this book on several occasions to ladies who were approaching their confinement, and where they had sufficient strength of mind to follow the suggestions therein given their cases were very greatly helped, and some of those who had previously suffered long and painful parturition recorded their experience as most satisfactory. The advice was that the patient should live well, principally upon fruit, and the idea which the writer advanced was that there should not be any great amount of mineral matter in the bone of the fetus, so that it should come quite easily through the passages. This, he believed, had been realized in cases which had come within his own experience. He would give one instance. Of course, one swallow did not make a summer, but he could give a number of cases if necessary. One, however, particularly struck him. It was the case of a lady who had borne four children, and in each case had experienced very long and painful confinements. On the fifth occasion he happened to be called in and, having just had the book in question lent to him, he handed it over to her, and took the advice of her husband about it, with the result that the patient, being rather a strong-minded woman, read and carefully followed the practice laid down, with a result which he well remembered. He was dressing on a Sunday morning between seven and eight when he was called to the house, which was about a quarter of an hour's journey from his own. The lady had been out of doors the evening before and had been in perfect health all through her pregnancy, and the confinement was over, and he had left the house before half-past nine. He thought that was an exceedingly satisfactory result, and the patient, from her previous experience, thought so also. On three subsequent occasions when he had the opportunity of attending her,

the same result followed. He also agreed entirely with Dr. Day as regards the subject of nursing. They did not always have the selection of the nurse, and sometimes the nurses were anything but what might be desired.

Dr. Jagielski also congratulated Dr. Day upon his excellent paper. He referred to the value of such an institution as that for the instruction of midwives, of which his father was the director, and spoke in congratulatory terms of the starting of such institutions, which in Prussia had been in existence for fifty or sixty years. Here in England, the movement was only of recent growth, and he did not think that as yet it had developed to such an extent as the importance of the subject merited. He pointed out that it was the greatest help and relief to the surgeon to find on his arrival at a confinement that a midwife had been already engaged who had prepared everything that was prescribed in their practice, and therefore it was of the greatest importance that midwives should have this opportunity of qualifying themselves by training and examination for the duties they would have to discharge. The speaker also alluded to the excellent results of using *arnica* in cases of confinement, and to the value of homœopathic treatment in cases where abortion was of frequent occurrence, and in which *apis* had served him in good stead.

Dr. Wolston (Edinburgh) said he should like to touch on one or two points raised in this paper. The first was as to the breaking of the membranes. No doubt there were some cases in which the rupture of the membrane was exceedingly advisable, but a sort of rule of thumb statement that the membranes should be broken, he certainly could not agree with. He was persuaded that the preservation of the bag of membranes was of immense value, particularly in certain cases. To allow the membranes to be broken away, and the head to come down on the perineum, was to prolong labor, because a hard, resisting body like a head down upon a rigid perineum would not have the same effect in dilating

it as the bag of membranes. The latter was in reality a hydrostatic bag, and water, as they knew, pressed equally in every direction according to the force employed. There were cases on the other hand in which the breaking of the membranes was of the first importance. Then as to the use of the forceps in suitable cases, he believed that they had all made mistakes in their younger days in not having used the forceps more frequently. In those days they were liable to be deterred by an element of fear, whereas they got over that disagreeable sensation when they were a little older. Practically he had put on the forceps in every third or fourth case, when there had been any delay. Of course in a rapid case they were not required. But no harm came when the work was done wisely and well. They must bear in mind, however, that the presentation of the head must be carefully made out. He remembered having been called in in consultation in a case where another medical practitioner had gone to work in this rapid way, put on his forceps immediately, after only an hour of labor, and pulled the head through, with serious consequences to the patient, who only recovered after several months' careful treatment. In that case the practitioner had evidently mistaken a posterior for an anterior presentation. They must therefore use them with caution. Thirdly, as to the binder. He believed the binder, as usually applied, was a downright abomination. He did not know what other members thought, but he knew that when he had taken the trouble to ask patients who had had a binder five or six times, and then had been induced to give it up on the seventh, they always elected to do without the binder. There was no possible utility in the binder when the patient was lying in bed in the early days. In his judgment, it only had the effect of pressing down the womb and its appendages deep in the pelvis, at a moment when it should be left free for the elastic tube, which the vagina is, to support it in its natural position, and he believed that a very large number of the cases of chronic metritis and retro-

version which fell into the hands of the gynecologist were the result of the binder having been put on too firmly. He felt convinced, from twenty years' experience of never using the binder, that patients got on more comfortably without it. The time to put the binder on was the fourteenth or eighteenth day, when they were rising. Give them a nice binder then, and they would thank you for it. As to the strength of the solution, he thought that one in a thousand of corrosive sublimate was a solution the strong'side. He knew there had been cases where a solution of that strength had passed into the abdominal cavity with very serious results indeed. Personally, he thought that one in three to four thousand was amply sufficient.

Dr. Gordon Smith (Liverpool) remarked that he had had a considerable amount of midwifery practice. When he first commenced his practice he knew nothing of homœopathy, but by and by he began to use *arnica* and *pulsatilla*, 3x in both cases. After a time he gave up *arnica* in favor of *pulsatilla*, and now he used in almost all cases, for the last month, usually *caulophyllum* in the morning and *pulsatilla* at night, the third decimal in both cases. He had noticed that the time he had to wait now at midwifery cases was not half so long as in his earlier days.

GRAVES' DISEASE—EXOPHTHALMIC GOITRE. *

BY

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For the benefit of the general practitioner, I wish to call attention to a résumé of the characteristics of this interesting disease. Being somewhat rare, I think that we are apt,

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at times, to overlook it ; and hence this paper, with a report of two cases recently observed, may tend to impress upon us all the nature and causes of the malady.

It is an established fact that in nearly every case at least two of the chief characteristics of Graves' disease are present :

First. The patient observes occasional attacks of palpitation of the heart, with increased frequency of pulse. Gradually the intervals between these attacks grow less and less, and a uniform rate of one hundred beats per minute is maintained at all times. Coincident with these phenomena are observed enlargement and marked pulsation of the carotids. At least, early in the attack, there is, as a rule, no valvular disease.

Second. In a few days, or weeks, or months, the thyroid gland becomes enlarged, although it never attains the enormous proportions observed in simple cases of bronchocele.

Third. Is observed the exophthalmos, or protrusion of the eyeballs, which is usually bi-lateral and of like degree in both eyes. This protrusion may be so great as to prevent the lids from meeting, and hence the eyeballs may at no time be fully covered. In many cases, an early symptom is the infrequent winking of the lids ; several minutes may elapse between the nictitating movements.

An early symptom, often, is a peculiar staring expression, giving a look of wonder or terror, due, some say, to sympathetic irritation ; others claim to deficient innervation of the orbicularis muscle.

I must beg your indulgence in thus bringing to your minds these text-book facts, but these are essential to a full appreciation of the two typical cases which I will now outline.

CASE I. Miss S., æt. thirty-six years. She has always been in good health ; has never been since infancy under medical care. April 4, 1891, her mother died, after two years' lingering illness, during which time the daughter

took almost exclusive care of her mother, and also acted as housekeeper; not until the last week was she relieved by a nurse. She had been a constant companion to her mother all her life, and she plainly felt her loss with especial keenness. April 13, 1891, five days after burial of her mother, patient called for treatment for an enlarged thyroid of gland, which she had noticed only within a very few days. The eyes were not especially prominent, and there was no complaint made about the heart.

May 2. No noticeable change.

May 13. Patient has been housecleaning, and now has symptoms like *la grippe*: generally aching about head, back, and lower limbs; weakness of legs; stomach disordered; no fever.

May 18. No better; all symptoms return unless she lies in bed; temperature normal; pulse 90; neck still full; advised to rest in bed.

May 20. Pulse 95; quick, tumultuous heart action; eyeballs protrude slightly, so as to render expression more like a stare; constant nausea, with vomiting of white, stringy mucus.

May 22. Stomach symptoms still predominate.

May 24. Pulse 105; no fever; complains of heart beating so fast that it tires her out; to-day first made voluntary complaint to me about her heart; great gastric disturbances.

May 26. Very weak; stomach rejects everything; heavy gray coat on tongue; nervous, very restless; extremities tremulous; pulse 115 to 120, quick and small; no fever; marked pulsation in epigastrium; abdominal aorta seems just under the finger tips on slight touch. Says her heart beats so fast that it seems bound to run away with her.

May 27. No fever; pulse 125, great nervous and arterial tension; extremities tremulous; great restlessness and anguish. Stomach abandoned for nutrition; occasional vomiting of masses of thick white mucus; a severe stomach catarrh.

May 28. A. M. Temperature 99, pulse 145. P. M. Temperature 100.2, pulse 144 when quiet, 180 to 200 while under examination by counseling physicians; violent beating of carotids; violent heart action complained of. General distress, anguish, and high tension of system. Heart not enlarged; no valvular murmur. Head and face flushed; superficial capillaries of skin visible on face, neck, and chest; feet and legs cold. Eyeballs some prominent, but not markedly so.

May 29. A. M. Temperature 99, pulse 145 to 160, small and weak; hard to count; not as strong as yesterday; not as restless; tongue red and dry. Evening temperature 100.6, pulse 145; general character the same; abdominal pulsation not as marked. Patient not improved; nutrient enemata not well retained. Stomach retains medicine but no food.

May 30. Temperature normal, pulse 160, much weaker at wrist; so weak physically as to want arms lifted about bed; nervous and restless; occasional vomiting of very thick white mucus. Serious sinking turn at 6 A. M.

2 P. M. Heart beats 170 per minute; pulse at wrist too weak to count.

9 P. M. Heart beats 165 to 170. Pulse not to be counted at wrist. Patient much weaker; fully conscious; wants to die, and be with her mother. During whole illness has had no desire to live.

May 31. Had sinking turn at 1 A. M., and 8 A. M. No sensation whatever of beating at wrist since 1 A. M. Heart beats about 170 per minute but very weakly. Died at 1.45 P. M. Gradual heart failure.

CASE II. Miss J., æt. thirty-one years. Ordinarily in good health. She had filled a portion of her time for three years teaching private music pupils. Always lived in Buffalo till September, 1889; then went to Illinois to act as teacher of vocal music in a large school. The new and increased responsibilities rested rather heavily upon her. During that winter she indulged freely indeed of hard drinking water,

and about that time she first noticed heavy beating of the heart on slight cause, or even without any cause.

In June, 1890, following, her friends observed an unusual fullness and protrusion of eyeballs. During that summer she studied under a new teacher very assiduously, instead of using her vacation to rest and recruit from her first year's real work.

In September, she returned West to her teaching, and in October wrote me about a fullness of the thyroid gland; said she and her friends noticed it, and that it seemed to increase rather than otherwise. I advised her to rest all she could, and do no extra work of any kind. Two months later, December, 1890, all the symptoms remained about the same and I applied galvanism three to five milliamperes, ten minutes three times a week, for seven or eight sittings. The general symptoms all improved noticeably under electrical treatment.

In June, 1891, after her second year of school care, an examination showed:

First. Heart action tumultuous but no valvular murmur noticeable; pulse 102 and regular; reasonably full. She has heavy beating of heart on slight exertion or excitement; more noticeable to her when lying down; then can feel heart beating through her back against the pillow. An occasional pain seizes her in heart when she walks some distance.

Second. Thyroid enlargement nearly disappeared.

Third. Eyes still protruding as before; and occasional pain felt in the head and eyes.

No special treatment ordered. Patient advised to rest carefully during the summer, and to avoid all work or worry.

September 1, 1891. All symptoms remain the same as three months previous; pulse still 100 per minute, tumultuous.

Referring to the etiology of these cases, we observe, in

passing, in the first and fatal case, a very violent complication of gastric catarrh. This doubtless had much to do with the unfortunate result, since it debarred possibility of building up the nervous system, which probably, in the majority of cases, is the first and most important part of the treatment. In this case the distinctive points as to the cause of the disease are, that the patient had become exhausted by months and months of care and anxiety over her mother, being obliged to be up waiting on her as often as every hour at night for at least the last nine months of her mother's illness, meantime being occupied in the same way by day. Added to all this came the grief incident to the death of her mother; it being noted that mother and daughter were especially bound to each other by the very closest bonds of sympathy. During all the days of the daughter's illness she grieved for her mother, and expressed no desire to live longer without her. The discovery of the swelling of the thyroid gland only five days after the burial of the mother shows a marked relationship in the matter of cause and effect. It is plain then to any casual observer that the cause of the disease in this case was a weakening of the nervous system by overfatigue, followed by a deep and lasting grief.

In the second case cited we have a history of nine months of unusual strain as a teacher in a large school, where the tradition is that the teachers are worked for all they are worth; this being followed by three months of hard study at home, her system had no opportunity to rally itself.

It is not surprising, then, to hear that the protrusion of the eyes is reported to be followed by a fullness of the thyroid, and an irritability of the cardiac action. It is a question whether the excessive drinking of very hard water during the first year had anything to do in the matter. Probably not. Particularly are we interested to observe that during the second year of her teaching she improved some under great restrictions in school work, and the use

of galvanism ; and further that for three months subsequent, under absolute rest, the symptoms all show a tendency for the better.

We have, then, before us two typical cases of Graves' disease ; both with all the leading phenomena of the strange malady, and both with a history which leads to the conclusion that a chief factor in the etiology was excessive strain to the nervous system.

From the standpoint of the family physician let it be remembered : First, that Graves' disease has three distinct elements, viz., palpitation of the heart, with frequent pulse, 100 to 160 per minute ; enlargement of the thyroid gland, generally moderated in size, and protrusion of the eyeballs.

Second. That in many cases, if not in the majority, the cause is some unusual strain upon the nervous system.

Third. That we should always bear in mind, when any member of one of our families is subjected to such a strain from overwork, worry, or grief, that we must be carefully on the lookout for one or all the symptoms just enumerated.

Fourth. That we may truly regard this possibility as another argument against the practice, noted in many families, of individual members caring for their dear ones exclusively themselves ; when, in reality, a good nurse would be a better and more prudent arrangement.

EPISIOTOMY.*

BY

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In selecting a subject for a paper to be read before our State society the thought has suggested itself to me that

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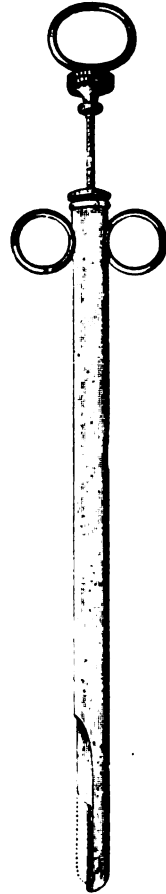
an article conveying experience interesting to every *general* practitioner would perhaps give more marked satisfaction and a more diversified discussion than the detail of experience exclusively of the *specialist*. The literature upon the subject chosen is certainly very meager, and I must confess that I had never read anything relating to it when I first incised the vulvar ring and designed and had made an instrument to facilitate and simplify the operation long before the publication of Prof. T. Griswold Comstock's admirable paper on the same subject published in the March number of the *Journal of Obstetrics* of this year.

According to this paper, of all the American and English authors only Prof. Lusk gives a full and complete description of the operation with the recommendation for its use. Also, according to Prof. Comstock's researches, the operation dates back to 1742 and was then proposed by Sir Fielding Ould. It is to-day resorted to in the hospitals of Germany, Austria, and Bavaria and certainly, when indicated, should be performed by every physician in his private practice. Prof. Lusk says it has been denominated the "young practitioner operation," but this seems to me to give a wrong impression of the operation unless the young practitioner has had large hospital experience in obstetrics, for certainly the experience of years in private practice (estimating the usual number of such cases that fall to the lot of the young physician), is required to decide without counsel when, and when not, to operate. I have found out by experience that to forcibly dilate the sphincter ani and *know when to stop*, requires an intuition that comes to the thumbs, that books and teachers cannot impart to you. So is it with the dilatation of the sphincter vagina and perineum; only an intuitive knowledge and touch, acquired from large experience, can decide the accoucheur when the extreme of dilatability is reached and necessity for episiotomy demanded. Of course cases more frequently calling for this operation are the primiparæ; but I have in several cases saved the integrity of the per-

ineum in multiparæ where perineorrhaphy had been previously and successfully performed, as well as in thick, unyielding perinæi with cicatricial tissue, where previous lacerations had healed by granulations. Where the mother has an undeveloped or undersized pudendum or the fetal head is over large or unyielding from advanced ossification, no amount of skill or manipulation can save the perineum from rupture at the completion of labor; and when I say perineum, I do not mean simple laceration of the posterior fourchette, but a complete and ragged tear through the perineum muscles as well.

When we have such a case, with the inevitable rupture imminent, having exhausted such topical measures as hot water compresses, hot oil, etc., etc., *then* the operation of episiotomy is not only called for but demanded, for two reasons; first, substituting one or two clean cuts through unimportant supporting tissue compared with the perineal floor, and secondly because of the simple after treatment of the wound or wounds compared with an immediate or remote perineorrhaphy.

The resistance to the exit of the fetal head is not the thin stretched border of the vulva, but at a point about half an inch within, and is occasioned by the rigidity of the constrictor cunni, transverse perinæi, and, possibly, the levator ani muscles. Just at the inception of an expulsive pain introduce a blunt pointed bistoury (the cutting edge previously protected within an inch of the end) flat-wise at the side, and about midway of the vulvar ring, sufficiently within so as not to cut the skin. As the head presses forward, turn the cutting edge toward the tense tissue and it will be felt giving away under the knife.



If operating on one side does not suffice, repeat the same operation upon the opposite side and in the same manner.

The hemorrhage is easily controlled and the after treatment is simply to introduce one or two stitches or leave it entirely alone, if the parts coapt nicely, as they usually do, and only requiring simple antiseptic dressing. The instrument referred to in the first part of this paper is here represented. The length and depth of the cut can be properly regulated by a set screw, and three rings give perfect control of the instrument without any exposure of the patient, and either side of the vulva operated upon with equal facility.

NEURALGIC DYSMENORRHEA.*

BY

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Painful or difficult menstruation is a symptom in a disease. Its pathology is not well understood, and learned physicians have variously classified dysmenorrhea according to their different notions as to the causes.

Hence we have obstructive, congestive, ovarian, membranous, and neuralgic dysmenorrhea. Such a classification serves only for convenience of description, for these different forms are merged into one another, though clinically they cannot always be distinguished. It is the purpose of this paper to consider a form which might properly be termed idiopathic or neuralgic dysmenorrhea. This form occurs in women and girls of a nervous temperament, whose habits of life have not contributed to physical development, but who have fallen a prey to the cultivating influences of fashion, luxury, and the restraint and enforced intellectual

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training of our schools. These influences, existing at the time when girlhood is blossoming into womanhood, interfere most seriously with the development of the organs of generation, and thus lay the foundation for disease.

Very little is known regarding the physiological process of normal menstruation, and therefore our knowledge of the pathology of dysmenorrhea is derived largely from clinical experience.

If a large uterine sound be passed into a normal uterus it causes no pain, as it passes the os internum; but if the same sound be passed into the uterus of a well marked case of dysmenorrhea it will occasion a severe aching pain resembling the pain at menstruation. Every careful and experienced observer in this field of investigation must be forced to conclude that there exists in these cases of dysmenorrhea a hyperæsthetic condition of the endometrium, especially at or near the internal os. Whatever be our theory of menstruation, the cause of neuralgic dysmenorrhea must be sought within the uterus itself. Pain begins with the appearance of blood within the uterus and continues until the flow ceases; hence we conclude that pain is caused by the presence of the flow pressing upon this highly sensitive endometrium.

There is often associated with hyperæsthesia an indurated state of the tissues and stenosis at the internal os, and frequently spasm at this point when the flow appears, thus offering obstruction and exciting uterine contraction; all these abnormal conditions are the result of imperfect development and atrophy.

In most cases of dysmenorrhea in nulliparous women ante flexion is found to exist, and now this ante flexion rarely ever offers mechanical obstruction sufficient to produce dysmenorrhea; but is itself the result of imperfect development.

There may exist stenosis associated with ante flexion, and there is often hyperæsthesia. Dilatation will cure both the

stenosis and hyperæsthesia; but the flexion will still remain after the dysmenorrhea has disappeared. Many of our cases have inherited this tendency to painful menstruation. Sometimes we find mothers and daughters all possessed of a neuralgic diathesis and all victims of dysmenorrhea. Here the pain is not confined to the pelvis, but there is neuralgia in different parts of the body. Perhaps the larger number of cases of dysmenorrhea are found in girls during the period of development. Too often those parents and teachers who have the training of girls are forgetful of the dangers arising from any interference with their physical growth. They are not allowed the freedom and exercise in the open air that nature demands; they are pushed forward in the training of the intellectual faculties at the expense of a normal development of the organs of generation. To cure these cases we must first look carefully to correcting the errors that have contributed to bring about a bad state of health. Many of these patients are anæmic, nervous, easily influenced by any excitement or emotion; and the most trivial cause or peculiarity in the habits at the time of menstruation will greatly aggravate the suffering. Nature thus demands more exercise, more oxygen, and more food, and girls should be encouraged to take exercise in the open air and to refrain from emotional or intellectual excitement. They should take plenty of good nutritious food and plenty of undisturbed sleep. They must be directed to *chew* bread and butter and beef, and *eschew* pickles, pies, and pastry of all kinds. Under such a regimen they will be best prepared for further treatment, if, indeed, any further treatment become necessary. Many of these cases will be cured without going beyond the resources of our materia medica. The indicated remedy will accomplish marvelous things for us if we will but devote plenty of time and study in the selection. Some of these cases will require local expedient. Resort may be had to external galvanization. This will in some cases accomplish much. But the treatment that

promises most certain relief is the dilatation of the cervical canal and the internal application of the galvanic current. Someone has compared dilatation to the operation of nerve stretching for the cure of neuralgia, and it proves quite as effective. Dilatation should be accomplished by means of a steel dilator, preferably Sims's, and never, except in extreme cases, by the use of tents. After dilatation is accomplished the careful use of the galvanic current will stimulate the nutrition and development of the uterus, relieve all hyperæsthesia and tendency to spasmodic contraction of the internal os, and complete the cure. The internal treatment should be begun with the very mildest current and it should be increased without interruption; but *never* carried to the point of possible danger to the tissues from the electrode. Either pole may be applied to the os uteri, though the positive is to be preferred in the treatment of this form of dysmenorrhea. The electrode should be insulated with a metallic olive-shaped tip, and should be held against and within the os internum, and made to traverse the entire cervical canal. The other pole should be applied by means of a broad electrode over the lumbar and sacral regions, and occasionally over the abdomen and hypogastric region. If this treatment be followed up, I believe the worst cases may be cured.

GYNECOLOGICAL SURGERY—WHEN TO OPERATE.

BY

CHESTER G. HIGBEE, M. D.

To every honest, conscientious doctor, whether he is a surgeon or not, the question, Is it best to have a surgical operation performed for the case under consideration? must frequently arise, involving, as it often does, the question of

life or death to his patient ; it places upon him the greatest responsibilities that anyone can be called upon to meet.

That little thought, and less discrimination, has been given to this subject by a certain class of ambitious surgeons during the few years last past, must have been evident to anyone who is familiar with the current medical literature of the day. Some of these operators "tread boldly where angels fear to walk," and their reports are so fervid, and the reported results so brilliant, that there is danger of the idea that these operations can be easily and safely performed, and that we shall have in America another epidemic similar to the craze for trachelorrhaphy which swept like "La Grippe" over the country a few years ago. Let us reason together and consider the cases that under the light of the progressive and conservative experience of the day, ought to have the aid of a surgical operation.

In a general way we answer, that minor surgical operations in gynecology are now so generally useful, and can be safely performed by any gynecologist who is intelligent and skillful, that no time need be taken in discussing them. Again we answer, that all other approved means ought to be used for the cure of cases before we subject them to the risk of an operation. It is well known that apparently simple cases, with no objective complications, not unfrequently prove fatal. The writer could relate several such instances that have come under his personal observation while visiting some of the most noted operators of the world.

The gynecologist who has a knowledge of, and faith in, the action of homeopathic remedies, has a resource that will enable him to cure many cases, without an operation, that he who has no knowledge of the action of these remedies would consider incurable without the aid of surgery. It is just here where he who has been a general practitioner, and has a practical knowledge of the complications and reflex symptoms of many diseases, ought to be better quali-

fied to judge of the particular case in hand than those who have not had this varied experience. So-called emergency cases will arise, where no time can be had to use ordinary measures for relief, and the surgeon must act promptly or life has flown beyond power of recall; he should not be blamed, if in such cases he makes some mistakes. In America the country practitioner is not unfrequently called upon to meet such emergencies when medical counsel cannot be obtained, and the life of the patient hangs in the balance. Some skillful and successful gynecological surgery has been done under such circumstances which is creditable to the profession. When such emergencies arise, the question "when to operate" is answered now or never. The general condition of the patient must be taken into consideration as one important factor when deciding when to operate. Negatively we can say, do not operate for *subjective* symptoms. The reason for subjecting a patient to a serious operation must be apparent, and not a subject of speculation or surmise. It is frequently impossible to make an exact diagnosis in abdominal cases, and we are fully justified in making a short exploratory incision for diagnostic purposes, if there are evident physical signs that indicate that an operation is necessary. Some one has said that marked anæmia, evident cachexia, or a faulty condition of any of the vital organs or viscera, at once forbids operations. Generally this is true, and exceptions in this as in other cases only prove the rule. A faulty condition of some of the vital organs and viscera may be secondary to, and dependent upon, a morbid growth that must be removed before the other organs can perform their normal functions. Marked anæmia, too, may be the result of hemorrhages, and the hemorrhage caused by the uterine fibroid. It is evident in this case that the fibroma must be cured before a cure can be had of the bleeding.

In many cases the best time to operate has been so definitely determined by those who have had the largest ex-

perience, that we can say, only delay the operation sufficient time to properly prepare the patient for it. Among these are abscesses and fistulæ of all kinds.

The drain upon the system is so great, and the prospects of a cure so uncertain without the knife, in these cases, that as little delay as possible should be had.

Lacerations of the cervix or perineum, if to such an extent as to impair nutrition, or weaken the patient, should have the benefit of a surgical operation immediately, and not delay until the parts involved are so changed that the result of the operation will be less positive. Under aseptic treatment no fear of septicæmia need be entertained, and we should allow no ordinary circumstance to defer the operation, hoping that by some chance or good luck the patient will recover. In all traumatic cases where the injury is so extensive as to cause urgent and dangerous symptoms, an immediate operation is in order and should be insisted upon. As typical of this class of cases, we mention rupture of the uterus during pregnancy, or of the sac in ectopic gestation, either of which is liable to occur from a fall or blow or severe straining. We believe there will be little dissent from the opinion that all cystic or polypoid growths should be removed as soon as possible after the diagnosis is made a reasonable certainty. The rule laid down by the authorities of a few years ago, that no operation should be attempted when there was pelvic inflammation to any extent, caused many fatal delays, and it is now known that it is by a surgical operation alone that the cause of the inflammation could be removed in many cases. Amelioration of symptoms could be had for a time, but sooner or later they would recur and a similar round of suffering and danger endured until the cause was removed by an operation. The so-called adhesion of the uterus from pelvic inflammation is typical of this class of cases.

Operations upon the rectum, perineum, and bladder are not confined to women, but, as by far the greater number of

these cases occur among women, they would appropriately be considered under the head of gynecological surgery. In no region of the body, or in any range of operative procedure, will we be able to add comfort and happiness to women more than by intelligent and skillful repair of the lesions of these organs. It is here that the ingenuity of the surgeon would be tried to the utmost to know when to operate, and when to repeat the operation, as he will at times be compelled to do by he ever so skillful and fortunate.

As before stated, injuries to those parts should be repaired as soon after they are made as circumstances will permit. By far the most of these cases are caused by some exigency during childbirth, and rightly belong to the domain of obstetrics. As most gynecologists are also experienced obstetricians, there need be no delay for this reason. We would earnestly urge no delay in operating upon all these cases. We will get union in a fair proportion of them and no further operation will be necessary, and the patient saved much suffering and anxiety. Where we fail in these primary operations no additional harm is done, and a subsequent operation can be performed with equal prospect of success. If from any cause the primary operation cannot be performed, we should do it at the earliest practicable opportunity thereafter.

Operations on the vagina will also necessarily be both primary and secondary. Rupture should be immediately repaired, while prolapsus caused by undue relaxation of the walls; old cicatrices, caused by ulcerations or caustics, and atresias will call for later operations. In the latter cases the extent of the disease will largely influence our decision as to the time to operate. In some of these cases of prolapsus, pessaries, electricity, and injections have been thoroughly tried and still the weakened and relaxed organ persists in coming down. No resources are left but mind cure or colporrhaphy. In our experience the latter has proven

the most satisfactory and the operation should be performed whenever the former measures have proven of no avail. It is rarely that a case of atresia of the vagina will be met with that cannot be cured by the proper application of electricity, yet some cases are reported where it is said this agent has been used and no results obtained. In such cases an immediate operation would be advised.

Perhaps it will prevent misunderstanding to say that unless electricity is used to remove some part by its caustic effect, we do not call it a surgical operation, though logically the use of it to dilate the cervix, or to stop hemorrhage, might be so called.

Operations upon the uterus, both of the cervix and fundus, are of such magnitude, and the results so important and uncertain, that the most skillful surgeon will deliberate well before deciding when to operate. In cancer of the cervix there is but little doubt but that the earlier the disease is recognized, and the diseased part entirely removed, the better it would be for the patient. If amputation of the vagina portion will remove all of the diseased tissues, that will suffice; otherwise, vaginal hysterectomy should be resorted to without delay.

The earlier all polypoid growths can be operated upon the better. Sarcoma, too, should be removed by cautery or curette as early as possible. Any abscess of the organ should be evacuated as soon as the pus cavity can be reached.

Just when to operate, if at all, for fibroids, for fibrocystic or cancerous formation of the body of the uterus, is still a debatable question and one that cannot be solved but by the results to be obtained by large experience and careful observation. When the symptoms point to degeneration and dissolution of these growths, and the adhesions are not so extensive as to preclude the possibility of removal, we see no excuse for longer delay; it then becomes a question of a short time when the patient will die unless the operation is performed, and sufficiently favorable results have been ob-

tained to warrant the operation when this stage has been reached. The time for operation upon an inverted uterus is also indefinite, and must be determined by the circumstances attending each individual case. If the uterus is not diseased, and the patient is so situated as to have care so that she can be comparatively comfortable, it is assuming a grave responsibility to say that she had better take the chances of an operation for removal. If the uterus is diseased, and other treatment proves incurable, amputation should then be performed.

Operations for ventral fixation are so rare, and the result so uncertain, that the time for such operation ought to be quite remote. We never have seen but one case where the operation was a benefit to the patient and a credit to the surgeon.

Removal of the fallopian tubes and ovaries has become so fashionable and such a common occurrence, that when to operate for their extirpation has a greater bearing upon the health of women than that of any other operation in gynecology. The discussion of this question, for and against, would fill volumes, and we hope is near a solution. Either Batty's recommendation and practice was greatly misunderstood, or he is responsible for the greatest number of needless and indefensible surgical operations of any surgeon of whom we have any knowledge, though the mania has had its run and the reaction has shown us that out of the slaughter has come experience and sound surgical knowledge that we are privileged to use for the good of our patients. We know that it is very rarely that a cyst or pus cavity in the tubes or ovaries can be cured without a surgical operation. When there are no positive indications to contra-indicate, the operation for the removal of such tumors should be performed as soon after the diagnosis is made as possible. In either case the membranes are liable to rupture or become inflamed, and more or less adhesions form to adjacent organs. The membrane may also be rup-

tured and the contents poured into the peritoneal sac, and death or immediate removal are the only alternatives. When the symptoms are not urgent, it is a commendable practice to build up the general condition of our patient to the highest attainable point, and at the same time use such remedies, either local or internal, as will be the most likely to stop the progress of the disease.

When discussing the subject of fibroids of the uterus, we purposely omitted to speak of the removal of the appendages to bring about a permanent menopause so that it could be considered in connection with the removal of the appendages for other causes. When we have a growing fibroid or myoma of the uterus, causing severe hemorrhage at the menstrual period, and the patient is not near the age when we can expect the flow to cease permanently, then the ovaries and tubes may be removed in the hope, and with a probability, that the menses will cease and the most alarming symptom in the case will be cured. In some cases the tumor evidently diminishes in size, and the added comfort enjoyed by the patient is sufficient to warrant the operation being done early. In cases where the symptoms point to an acute abscess as being the cause of much of the tenderness and pain, no delay is admissible, for the abscess may break into the peritoneal sac, and cause peritonitis.

It is so rarely that normal tubes or ovaries should be removed for mental or nervous symptoms, that the only rule when to operate is after all other means have been intelligently used, and the patient is constantly growing worse. So many failures are known to have followed the removal of the appendages for neuralgia, that it is only as a last resort that it should be attempted.

So much is said, and the opinions are so diverse on the subject as to the advisability of doing any gynecological operation when the patient has evidently cancerous cachexia, that no specified rule can be formulated for this class of cases, other than that heretofore mentioned in con-

nection with the uterus. That some lives have been saved and others prolonged by such operations is well known, and it is good surgery to give the patient the benefit of the doubt, and operate when there is an equal chance of removing the disease.

We cannot close our paper without urging upon surgeons the importance of doing their work in time, but also doing it thoroughly. Our school has been accused of timidity and want of firmness in surgical operations. Mr. Lawson Tait said that some of the best surgeons he had ever had with him were homeopaths. Having the commendation of as bold an operator as Tait, we can endure with equanimity the slurs of the minor surgeons.

INFLAMMATION OF THE UTERINE APPENDAGES—GENERAL CONSIDERATIONS—CLASSIFICATION OF THE SALPINGITES.

BY

PROF. SAMUEL POZZI,

PARIS, FRANCE.

Continued from page 453.

II. LESIONS OF THE OVARIES.—The ovary, though often unattacked in catarrhal salpingitis, is frequently involved in the lesions of acute purulent salpingitis and in those of the chronic form. Then it is often deviated, fixed by adhesions in the Douglas cul-de-sac or to the sides of the pelvis. It is not impossible to have suppuration independent of the tube, but such cases are exceedingly rare. Usually the ovarian lesions are rather less advanced than those of the tubes. Exceptionally they exist alone as a chronic, sclero-cystic ovaritis. The initial alterations of acute ovaritis are imperfectly known. The advanced

lesions that are most frequently met are: 1. False membranes (to which I shall not return). 2. Microcystic degeneration. 3. Sclerosis. 4. Suppuration.

Microcystic degeneration.—This name, or that of chronic follicular oöphoritis, has been given to a lesion characterized by the presence of numerous small cavities, varying from the size of a millet seed to that of a pea, strewn over the surface of the ovary. This form has often been described in cases where castration has been performed simply for painful symptoms. These cavities contain a serous, clear liquid, sometimes clots. Some authors see in this condition undoubted pathological alteration. Others, in greater number, consider this state as having nothing morbid. It is, in fact, very probable that these small follicular cysts have, by themselves, no inflammatory significance, and they are met where no symptom exists. But they may, however, play a certain rôle in creating by their multiplicity a true vulnerability of the organ, and, in fact, interstitial sclerosis is often seen in ovaries thus attacked.

Sclerosis of the ovary, or interstitial ovaritis, is the lesion which corresponds to the generality of the subacute or chronic inflammations. In its early period it is not incompatible with ovulation. But if it passes certain limits, the follicles are compressed and strangled (Slavjansky.) The compression of the nerve filaments, produced in the same manner when the ovary is atrophied by sclerosis, has been considered as the principal cause of the nervous symptoms for which Battley's operation is performed. Most frequently the immediate cause of the sclerosis appears to be a localized peritonitis, a peri-oöphoritis, and the alteration progresses from the periphery to the center. This peri-oöphoritis may be wanting, however, and the point of departure of the proliferation may be in the interstitial tissue of the ovary. It is in these cases that ovarian hypertrophy may acquire the size of a goose egg and present on its surface a mammillated aspect, as if cirrhotic.

Jones has found on an ovary of this kind, the size of an egg and granular on its surface, an interesting lesion that I have already noted in speaking of chronic metritis—lymphatic ectasia. The lacunæ were filled with an almost homogeneous lymph, with some lymph corpuscles. An elastic coat and a thick endothelium were clearly distinguished. Sclerosis of the ovary usually coincides with microcystic degeneration and thus is found constituting a mixed state,—sclero-cystic ovaritis,—much more frequent than the isolated lesions.

Suppuration of the ovary most frequently coexists with that of the tubes. Both are fused to form the wall of a purulent pocket, the pyo-salpinx is then in reality a pyo-oöphoro-salpinx. In some cases the tube may present a condition of chronic interstitial endometritis while the ovary alone may be transformed into a purulent cavity, or present circumscribed abscesses. In similar cases the inflammation is often propagated by adhesion and infection coming from the tube which has been the first attacked, and in which, without doubt, after evacuation of its contents into the uterus, the inflammation has assumed the chronic form, while the purulent material remained imprisoned in the ovary. At other times, these organs having remained apart from each other, an indirect ovarian infection through the lymphatics must be admitted. However this may be, it is probable that the formation of an abscess in the ovary is often favored by a pre-existing small cyst, follicular cyst, or a cyst of the corpus luteum, or simply by microcystic degeneration. When this predisposition does not exist, the acute inflammation gives place more frequently to peri-oöphoritis.

Symptoms.—It is rare to observe an acute salpingitis outside of a similar inflammation of the uterus. It is therefore difficult to distinguish in a given case the symptoms which proceed from the one from those that belong to the other affection. The uterine syndrome occupies equally in

the two diseases the first rank in the symptomatic description. I will note, however, the special points which indicate invasion of the tubes and ovaries by the inflammation.

The pain offers the character of pseudo-neuralgic attacks seated in the region of the appendages and in the lumbar region. There are radiations, above, toward the epigastrium; below, toward the thighs. Sometimes, but not in all cases, they occur as true colic, that has been called tubal colic, and we may be misled by the evacuation of little muco-pus, at the close of the paroxysm, proceeding less from the tubes than from the uterus, which has been incited to contraction by the attacks of pain. Pressure in the region of the appendages is painful, both by abdominal palpation and by vaginal examination. If the inflamed ovary is compressed between the two hands, an exquisite pain is awakened (Gallard), especially on the left, for the left side is most frequently attacked. The pain in the lumbar regions is often attended with gastralgia and vomiting. It is most frequently manifested at the time of the catamenial molimina. Exceptionally it is observed that the menses coincide with a period of calus and that the crises are produced in the interval. Menorrhagia is an almost constant symptom, but there are often long periods of amenorrhœa, or of great irregularity of menstruation.

Examination of the inflamed organs in tubo-ovaritis is very difficult on account of the pain that is occasioned. Patients should be anæsthetized if there is doubt and if immediate interference is to be decided on. I cannot be too emphatic in criticising a systematic neglect of this valuable auxiliary and against the substitution of a single element of diagnosis—localized pain for the exploration of the anatomical condition of the parts. Such a neglect leads to a too frequent resort to exploratory laparotomy. Palpation of the appendages should conform to the excellent precepts Schultz has laid down. For examination of the right side, the index and middle fingers are introduced into the vagina, the

left hand being placed on the abdomen; for the left ovary this order is reversed. The patient is placed on her back, the knees uplifted, and the thighs rotated outward; the psoas muscles are then tense. The internal border of these muscles is followed to the superior strait, then directing the exploration a little more inward toward the uterine cornu. Here a small ovoid tumor is encountered, normally the size of an almond, that is included between the two hands. A lesion of the appendages can scarcely escape an exploration made in accordance with these rules under an anæsthetic.

Noeggerath has proposed to make exploration of the tubes by vesico-rectal examination, and he has thus approximately made out certain details that it would evidently be impossible to recognize otherwise. But this method should be employed only as a last resort. Although Hegar affirms that he can recognize by touch microcystic degeneration of the ovary and catarrhal salpingitis, it must be admitted that so great a delicacy of touch will be the possession of but very few surgeons. However, in acute salpingitis one will often perceive the lesions more easily than would be expected, because there is added a peripheral œdema which doubtless trebles the volume of the inflamed tube. In chronic salpingitis the tube will be felt as a resisting cord, immobilized by adhesions to the sides of the pelvis. When with these physical signs and the manifest antecedents of metritis there is a fixed pain localized in the region of the appendages, presenting the characters that I have indicated, a salpingitis can be diagnosed with certainty. Pus will be suspected if the point of departure is a recent blennorrhagia or the revival of a *post abortum* septic infection.

Diagnosis.—The pain of the salpingitis must not be confounded with that of ovarian neuralgia. The latter is generally seated on the left, but may be bilateral. Charcot has shown that it is often accompanied with anæsthesia of the same side and hystero-epileptiform attacks. The peculiar hysterical character of this pain differentiates it from that

of salpingitis. Lumbo-abdominal neuralgia, which may exist alone, and which so often accompanies metritis, has its distinctive sign, its special seat, in the abdominal wall, where it is awakened by superficial pressure, especially on the points where the nerves emerge. The pressure on the appendages may then appear painful, because of the sensitiveness of the abdominal wall. Repetition of the two modes of exploration successively should clear up the diagnosis.

Inflammation of the uterus will be recognized by its special symptoms, which I need not repeat. It is rare that there do not exist at least some vestiges in metritis patients affected with tubal inflammation. Even when it preponderates, metritis is frequently accompanied with a slight degree of ascending salpingitis, too slight to give rise to physical signs appreciable by the touch, or to merit a place in the nomenclature of the affection, or to modify the treatment, but sufficient, however, to increase the sensitiveness of the appendages.

Is it possible by physical examination to determine, in oöphoro-salpingitis, what belongs to the tube and what to the ovary? It must be admitted that this is usually impossible, and happily is not necessary in deciding the question of operation. Sclerocystic disease of the ovary may exist without notable tubal lesions, but the affections of these two organs are rarely dissociated. The ovary is very frequently even united to the tube by adhesions so that the tumor is mixed tubo-ovarian. There exist some cases, however, where by bimanual exploration it is possible to differentiate between the thick cord-like form of the tube and the oblong tumor formed by the ovary. The latter is much more mobile and more detached from the uterus. It often demands for its recognition a long search, and the introduction of two fingers deep into the posterior and lateral culs-de-sac. In some cases bimanual palpation, with rectal touch, will be preferable. Besides these characters of form and mobility,

the ovary presents, when it is inflamed, an exquisite sensitiveness which causes the patient to cry out and to shrink on the slightest contact of the exploring finger. Finally, when the ovaritis predominates, especially on both sides, the dysmenorrhea is more intense, and sudden augmentations are noticed in the tumor at the menstrual periods, either from a simple congestion or from a sanguineous extravasation into the microcystic cavities at that time.

Cystic salpingitis and peri-salpingitis will be recognized from the volume, the character, and the connections of the tumor that they produce. However, it should be remarked that at intervals of a few days there may be recognized, by turns, either the elongated tumor of acute or chronic salpingitis, or the rounded and more or less diffuse swelling of peri-salpingitis, induced by an acute exacerbation of short duration.

Progress and Prognosis.—Inflammation of the mucous membrane of the tubes is infinitely more rebellious than that of the tubes. When the septic element is intrenched in the multiple fold of the external third of the organ, it is inaccessible to direct therapeutic measures, and if resolution takes place it can justly be said that it is spontaneous and by local destruction of the microbes. It is known that this fortunate result is not impossible in other regions. It may take place here too, especially if judicious treatment be directed to the uterine mucosa. May this cure be accomplished with *restitutio ad integrum*? Assuredly, but in exceedingly rare cases. After the cure of an acute inflammation the tube often remains more or less altered. Anatomical facts also show the possibility of a cure with atrophy remaining. On the other hand, in the clinic, the persistence of the morbid symptoms, when the appendages are once attacked, proves how rebellious the disease is and what lingering traces it leaves behind.

The special gravity of acute or chronic salpingitis lies in the tendency to attacks of peri-salpingitis (pelvi-peritonitis)

which are always imminent. Fatigue or errors of diet may rekindle the inflammation. Lawson Tait believes that in some cases a few drops of muco-pus have fallen into the peritoneum and produced irritation. Though this theory may be a little crude, there will then be found on examination a peri-peripheral doughyness caused by infiltration or by acute œdema of the subperitoneal cellular tissue. In most cases resolution then takes place with the aid of quiet and judicious management, until a new attack. These attacks may occur successively, during months and even years, and are remarkable each time for the suddenness of the appearance and disappearance of the inflammatory tumors found in the culs-de-sac. These tumors, being formed by small circumscribed nuclei, give the sensation of ganglionic masses, and, in consequence, have been attributed by many authors to inflamed ganglia. From this have arisen the terms peri-uterine adenitis, adeno-lymphangitis. Ganglia do not exist in this situation, so it is not adenitis; but this acute œdema is produced without doubt around the lymphatic trunks, and is consequently a peri-lymphangitis. It is observed above the vaginal culs-de-sac, at the sides of the cervix, in a point where Poirier has described convolutions of the lymphatic vessels which pass from the cervix to the iliac glands.

Sterility is not an absolute consequence of salpingitis, as the inflammation may be cured without obliteration of the tubes. However, when a chronic salpingitis has occluded both tubes, fecundation is impossible, and this is without doubt the cause of sterility in the majority of prostitutes.

Treatment.—Though a woman suffers persistently in the region of the appendages, this is not sufficient, as some operators would have it, to authorize laparotomy, even though confined to exploratory incision. After a certain period of surgical excess we have again come to have a greater respect for the conservation of the reproductive function to strive for cure in place of extirpation. The

treatment of catarrhal tubo-ovaritis is associated with that of metritis, just as that of ascending pyelo-nephritis corresponds with that of the cystitis which produces it. Absolute rest, slight purgatives, rigid antisepsis of the vagina, hot and prolonged vaginal injections, are the first measures to be prescribed. To these may be added, if required, bleeding, either by scarification of the cervix or by leeches over the iliac fossæ, an excellent means of quieting the acute pains, when there are no contra-indications. The application of a succession of small blisters, with morphine chlorohydrate (1 centigramme) on the denuded surface, repeated cauterizations in the iliac region, prolonged warm baths, enemata of laudanum, of valerian, of chloral, are the best means of quieting the pain.

We may hope to cure the salpingitis at the same time with the endometritis, provided the lesions have not had time to become inveterate. Uterine curetting, followed with repeated injections of tincture of iodine as described under metritis, has yielded excellent results in my hands in the early stage of salpingitis. Trélat has obtained similar success by curetting and injections of creasoted glycerine. It is also to the antiseptic treatment of the metritis, rather than to the mechanical action of dilatation, that we must refer the cures published by Walton, Gottschalk, and Doléris.

Should curetting be performed when the salpingitis is accompanied with an acute peri-salpingitis, characterized by painful nuclei in the vaginal culs-de-sac? I think not. It is better to wait until it disappears under the influence of rest and antiphlogistics. It subsides very rapidly when it does not depend on an encysted tubal tumor. Such an attack permits an important positive diagnosis. In fact to recommend forced dilatation and curetting as a curative measure in perimetritic exudation, according to Walton, of Brussels, and Pouillet, of Lyons, is to formulate a dangerous rule, because it is based on the supposition that one would never make a mistake in diagnosis. Certainly, treatment

by curetting, has, in some cases, cured or relieved serous peri-salpingitis together with the salpingitis, but this treatment may, in analogous cases, kill patients affected with unrecognized pyo-salpinx by causing rupture of the cyst. In view of this danger, and the frequent presence of great uncertainty of diagnosis, is it not better to wait, before curetting the uterus, until the acute trouble has disappeared, and to make certain that there has not been a concealed accumulation of pus? Apropos of indirect treatment, I may allude to the supposed efficacy of electricity in some forms of salpingitis. I believe that it has been considerably exaggerated. It appears certain that we should not use puncture in encysted accumulation in the tubes, as the fluidifying electrode is as dangerous as the trocar. If there is a hydro- or a hemato-salpinx it may also cause suppuration. If there is a pyo-salpinx, we are exposed, by this incomplete opening, not only to a fistula, but still more to septic accidents. Vaginal galvano-puncture has also the disadvantage, if it does not penetrate the collection, of causing adhesions, which remain a source of painful dragging and an obstacle to a rapid operation. With these exceptions, I recognize the utility of the intra-uterine galvano-caustic, which, by modifying the endometrium, may cure a catarrhal salpingitis at the same time. But I believe it is more complicated and less sure than curetting and intra-uterine injections. In very nervous women the faradic current, applied with an intra-uterine bipolar electrode, has given relief. But it is always necessary to proceed with care and to fear in every case a hidden collection of pus, as electrization of the uterine cavity has caused the rupture of a pyo-salpinx.

Massage has been strongly advised of late years for all inflammations of the uterus and appendages, and like all new measures has excited an undue amount of enthusiasm. It is far from being inoffensive. I believe it should be reserved solely for cases of chronic salpingitis, without any suspicion of an encysted collection. In cases of acute

inflammation massage does more harm than good. However, I advise its use for cases where there are the remains of previous inflammations, adhesions, cicatricial deviations, causing pains, a condition for which laparotomy has been too often performed.

If all other therapeutic measures fail, after a sufficient trial, recourse to a radical operation, oöphoro-salpingotomy, is justifiable. There should be no hesitation when the intensity of the symptoms leads to a suspicion of a purulent salpingitis that is rapidly becoming a menace to life. Here operation should not be proscribed, although one should be more conservative in chronic, non-purulent tubo-ovaritis. These lesions, in fact, while not directly endangering life, make it quite insupportable by the almost incessant pains and the effects on the general health. But it is only after six months, or less, of patient treatment, by the means I have indicated, that the surgeon would be justified in advising castration for a non-purulent salpingitis.

Ablation of the appendages, save in exceptional cases, is a benign operation. It comprehends in reality two distinct operations: 1. The rupture of the peripheral adhesions with replacement of the uterus; generally retroversion or retroflexion. 2. Ablation of the tube and of the ovary as near the uterus as possible.

The abdominal incision should be the rule. The vaginal incision does not appear to offer any great advantages here, and presents some grave disadvantages when complications occur during the operation. It is always necessary to remove the ovary on the side from which the tube has been extirpated, even though it does not appear diseased.

In certain cases could we not confine ourselves to the first part of the operation, separation of the adhesions and liberation and replacement of the uterus and its appendages? Hadra was the first to suggest that the morbid symptoms for which the healthy ovaries have been so often removed, notably the sharp abdominal pains, could be

cured by simply breaking up the adhesions. He then proposed, whenever laparotomy was performed, to carefully examine all the organs for adhesions, cautiously slipping the hand between the intestinal loops, under the omentum, above. He is satisfied with this procedure if the appendages are normal and only removes them if they are actually diseased. Polk goes further in this direction. Having seen the disease completely cured after removing only one tube, although the one left in place presented manifest symptoms of inflammation, he proposes to simply express the muco-purulent contents of the diseased tubes, to make the peritoneal toilet, and to close the abdomen, after having performed hysterorrhaphy, if necessary. Mundé rallies to the support of this procedure and proposes to add catheterism of the tubes and irrigation from the abdominal extremity. Howitz has also replaced castration in some cases with the liberation of adhesions.

He cites a remarkable observation when the phenomena of chronic salpingitis have thus been cured without salpingotomy, although the right tube appeared inflamed and swollen. He especially insists on the pathological rôle of adhesion of the omentum to the symphysis pubis. This relative conservatism is also manifested among other authors. J. L. Championnière and Terrillon have pronounced in favor of this direction in a few cases. Martin has not confined himself to the destruction of adhesions; he opens the obliterated extremity of the tube and has even reconstructed a pavilion.

It is impossible to judge these recent procedures. Perhaps it is necessary to fear passing from one extreme into the other, and after having been too prompt to extirpate, we should not be in too much haste to substitute ingenious operations of a deceptive or a doubtful efficacy. However, the fortunate results of simple hysteropexy, after rupture of adhesions, in cases when there manifestly existed salpingitis and peri-salpingitis, show that the tubes and ovaries

have certainly been sacrificed in cases when they could have been preserved. The replacement of the uterus, the liberation of the appendages, and the antiseptic cleansing of the pelvic cavity, which is a necessary consequence of the operation, will surely diminish the number of oöphoro-salpingotomies. We could without doubt reserve extirpation of the appendages for three classes of cases: 1. Ovaritis and salpingitis where the presence of pus and its consequences are feared. 2. Painful sclero-cystic ovaritis. 3. Chronic parenchymatous and cystic (serous or hematic) salpingitis, where, in spite of the only slightly menacing progress of the lesions, it is necessary to operate for the relief of menorrhagic and dysmenorrheic accidents and nervous reflexes.

The ablation of the inflamed appendages, containing only a small quantity of mucus or of muco-pus, without transformation into pyo-salpinx, is, we can say, a benign operation. Conservatism is not demanded so much by the gravity of the operation as by the consequent sterility.

CYSTIC OÖPHORO-SALPINGITIS.

It is convenient to place in the first rank, among the cystic dilatations of the tube, that which is due to the accumulation of pus. It seems to have been proven, in fact, that pyo-salpinx is often transformed into a serous and sometimes into a hematic cyst. When, without doubt, by spontaneous destruction of the germs, the inflammatory process is arrested, an abscess of the tube may, like a cold abscess, change into a serous form by a sort of clarification of the pus, its solid elements being deposited on the wall while the serous part increases in quantity. Such appears to be the origin of the great majority of cases of hydro-salpinx. Finally, the rupture of the new vessels in the walls of a pyo-salpinx of long standing has sometimes filled the sac with blood.

Pathological Anatomy.—Pyo-salpinx, or purulent cyst of the tube, is a consequence of purulent salpingitis, in par-

ticular from blennorrhagic, or from puerperal infection, the latter relating principally to *post abortum* cases. Lawson Tait and Freund have attached great importance to an incomplete development, to an infantile state of the oviduct, which predisposes to obliteration and to cystic degeneration. After its external extremity is closed by agglutination, and by an intussusception of the fimbriæ of the pavilion, the tube becomes dilated in its external two-thirds, or in nearly its whole length. More frequently there remains about one to two centimeters of the tube near the cornu of the uterus that preserves almost a normal size, but presents an increased firmness. The pavilion is sometimes adherent to the ovary, which is more or less completely fused with the cyst. It is rare to find the pavilion free and intact beyond the limited pus sac, because of an obliteration internal to it near the uterus. False membranes are disseminated around the tubes and ovaries, fixing them most frequently posteriorly in Douglas's cul-de-sac. The uterus is, in consequence, usually deviated from its normal position. The left tube is almost constantly larger than the right.

The cysts are variable in size. They have been found as large as a fetal head. But ordinarily they do not exceed the volume of a small pear, and frequently take a similar form. Often they are curved on themselves in the shape of a French horn. The color is a yellowish white. The thickness of the sac is variable. There frequently exists a weak point which corresponds to the posterior adhesions, so that there is often difficulty in avoiding rupture at this place during extirpation. The pus is usually creamy and yellow, presenting a fetid odor when the adhesions with the rectum are intimate. A cyst of the broad ligament, or of the ovary situated immediately under the inflamed tube, has been seen to suppurate and communicate with it. I have met an example of the first variety.

With the microscope, the internal surface is found covered

with ramifying vegetations, analogous to those of acute catarrhal salpingitis, but two or three times thicker, owing to the infinitely greater infiltration of the stroma by round cells. They are covered by a simple layer of cylindrical cells which has persisted in the fundus of the cavities which separate them. The deep layers of the mucosa are rich in fusiform cells. Nearer the surface exists a zone, or cellular infiltration, so abundant that it gives the appearance of granulation tissue. The walls of the tube, in the part not dilated, which appear relatively normal to the naked eye, are also infiltrated with embryonic cells. The dilatation of the vessels is especially noticeable.

In pyo-salpinx there may exist a certain permeability of the inferior end of the tube. It has been said that in this variety—profluent—the walls are thicker. This appears to be due to the fact that they are not distended to excess. It has also been claimed that the hypertrophy of the muscular fibers could, then, assure evacuation of the sac. This is very doubtful. It would rather be due to overdistention. Pyo-salpinx may coincide with uterine tumors, fibrous and cancerous.

Cold abscess of the tube, or tubercular pyo-salpinx, is distinguished with difficulty when there do not exist similar lesions of the uterus and ovaries at the same time. There may exist, however, on the contiguous peritoneum, characteristic tuberculous granulations. With regard to caseous masses in the tubes, they may be produced by a simple inspiration of pus, and this phymatoid appearance, to which the older writers attributed so much value, is of little importance. The microscope alone can solve the question by showing the special cellular structure of the tubercular follicle, with its nuclear zones grouped around the giant cells, and especially Koch's bacillus. Hegar and Orthmann have recognized this, but, like the gonococcus of Neisser in blennorrhagia, it may be wanting (having disappeared).

without our being able to affirm that the lesion is not specific.

Sometimes the ovary makes an integral part of the sac by fusion with it. At other times small disseminated abscesses proceed, without doubt, from the suppuration of follicular cysts. Finally, it may contain a large purulent cavity.

Hydro-salpinx, or tubal dropsy, is, in an anatomical point of view, the oldest known lesion of the tube. But it cannot be undoubted that it has often been confounded with certain tubo-ovarian cysts, where the tube is not dilated itself but only elongated, hypertrophied, and adherent to an ovarian cyst communicating with it. Thus are explained the colossal dimensions the older writers, and even modern ones (Peaslee), attributed to hydro-salpinx. It is doubtful if these tumors can exceed the size of a fetal head. Most frequently they attain only that of a small pear. The appearance is smooth, the color bluish white, the walls are generally thin, transparent in portions, papyraceous. There are generally few false, superficial membranes, or they are thin and distended, for the hydropsia of the tubes corresponds to an extinct inflammation of very old date. Fro-riep divides hydropsia tubæ into two varieties, *aperta* and *occlusa*, according as there is an opening or an occlusion at the internal extremity.

Hemato-salpinx should be distinguished from the small hemorrhages or hematomas of the tube which distend the simply inflamed walls of the oviduct. These effusions of blood, susceptible of resorption, constitute a symptom rather than a disease. Hematocele of the tube, or true hemato-salpinx, comprises both an extensive alteration of the walls, which have assumed a cystic character, and a modification of the sanguineous liquid, similar to that which it undergoes in hematocele. It is, in a word, a stable lesion in place of a transitory pathological symptom, like the simple effusion of blood in an inflamed organ.

But the preceding distinction not having been made by other authors, I shall conform to the common usage. If we leave to one side cases of retention of blood by atresia of the genital passages, which should be treated under malformations, there remain two chief varieties of hemato-salpinx :

1. The first, and without doubt the most frequent, is apoplexy of the tube, following incidentally in the course of a catarrhal inflammation, or even in the course of a menstruation that has been disturbed by excessive fatigue, or by a chill in a neurotic or a plethoric individual. It is possible that the symptoms attributed by some authors to congestion of the uterus, to pelvic congestion, have no other origin. The lesion does not generally persist, the clot is absorbed, and the symptoms may cease by degrees unless they have been grafted, as is so often the case, on the symptoms of a chronic parenchymatous salpingitis.

2. The second variety of hemato-salpinx, the only one which possesses a true anatomical individuality, is especially characterized by the presence of a sac analogous to that of pyo-salpinx. To development of this sac, I believe it is necessary to assume either a tubal pregnancy, arrested in its development by early death and absorption of the embryo, or a previous pyo-salpinx that has obliterated the tube and thickened the walls in proportion as it dilates. The hemorrhage following in a pathological cavity, from a surface incapable of resorption, becomes definitive. Sometimes this transformation is made directly, sometimes there is an intermediate stage of hydro-salpinx. In the last case the fluid is clearer and the wall thinner. On the other hand, it may happen that a hemato-salpinx suppurates secondarily. The infection then occurs rather by the lymphatics than from the uterine cavity, with which all communication is closed.

The size of these sacs does not generally exceed that of a pear. However, Lawson Tait has cited one which rose

beyond the umbilicus and contained several liters. It appears to me difficult not to believe that he had at the same time an encysted intra-peritoneal hematocele connected with the hemato-salpinx. Hemato-salpinx is often seen to coincide with fibroids. It is not to the pressure of these tumors on the *ostium uterinum* that it should be attributed, but rather to a hemorrhagic metro-salpingitis which accompanies the development of the myomata.

The sac of an hemato-salpinx is thick in places, thin in others. Hypertrophy of the muscular fibers may be met as in pyo-salpinx. The communication with the uterus may persist. With regard to the contents, the blood may be syrupy and of a chocolate color (principally where the lesion is due to menstrual retention from malformation); more frequently the liquid is a mixture of blood and serum, or of blood and pus. Clots may form layers on the wall or small free fibrinous masses. Histological study of the sac shows an irritative process, less marked than in pyo-salpinx. However, there is still an unusual richness of the mucosa in fusiform cells which, in some folds, seem to elevate the deep layer perpendicularly. The summit of these folds is generally deprived of epithelium. The intervals which separate them may preserve a rich capillary plexus, gorged with blood, that can be followed to the surface of the mucosa. In some places, small parenchymatous hemorrhages hide the framework of the tissues.

Symptoms.—It may appear singular, *a priori*, that one should attempt to present simultaneously the clinical picture of purulent, of serous, and of sanguineous collections. In fact, except from clinical observation, we would hardly believe that a woman could carry in the abdomen one or two sacs filled with pus without presenting grave symptoms, or at least appearing to suffer. Between the initial period of formation and the ultimate period of inflammation of the contiguous tissue and efforts of spontaneous evacuation, pyo-salpinx passes through a torpid and latent phase, in which

the economy, protected by the perfect encystment of the septic liquid, seems to tolerate its presence. The rational signs are exactly similar, then, to those of a chronic salpingitis, and the physical signs do not differ from those of hydro- or hemato-salpinx. A picture including all these conditions can then be presented by merely adding certain characters which belong to the acute period of abscess of the tubes. This picture does not differ materially from that which I have previously traced, apropos of non-cystic salpingitis. There are the same pains, the same menstrual troubles (amenorrhea, dysmenorrhea, menorrhagia); however, the last may be wanting in exceptional cases. In hemato-salpinx Puech has sometimes noted an incessant flow of blood, occurring in very small quantities, in the absence of the menses.

I must also mention again another symptom, the value of which has been much exaggerated. I refer to a sudden flow, following an attack of colic, of a certain quantity of serous, sanguineous, or purulent fluid. This phenomenon may occur at regular intervals—every month, every six months, for example. Is this due to the persistence of a permeable uterine orifice that relieves the excessive repletion of the cyst? Is it merely the expulsion of the contents of the inflamed uterus from reflex contraction of its wall? If we remember how frequent is the obliteration of the cystic tubes on the side of the uterine cavity, we will be tempted to accept the latter explanation. This peculiarity has been noted some time since by several observers. It is the *hydrops tubæ profluens* of Froriep. Klob, from observations made on the aged, thinks that this is an explanation of the supposed return of the menses after the menopause. Sometimes by pressing on the tumor through the abdomen, it can be made to empty some of its contents into the vagina. This flow of pus, induced by abdominal pressure, or pyo-metrorrhea, has been mentioned as a probable sign of pyo-salpinx.

Two groups of symptoms only are specially characteristic: the pains which draw attention to the appendages, and the tumor found at the side of the uterus by local examination. Physical examination will be made by bimanual exploration combined with rectal touch. Great care must be taken, as grave, and even fatal accidents have been caused by the rupture of a pyo-salpinx from too violent an exploration. The cystic tumor of the tube presents very different characters according as it is free and, to a certain extent, mobile at the side of the uterus, or as it has fallen into Douglas's cul-de-sac and become fixed by adhesions. In case the tumor is free, the two hands can seize a small elongated mass, in the form of a roll or of a pear at the side of the uterus, from which it is separated by a groove formed by the pedicle. When the tumor is bilateral it appears like a wallet thrown over the uterus. Fluctuation is rarely perceived, but pain is always developed if the patient is not anæsthetized. Sometimes, while perceiving this sensation on one side, all the vaginal cul-de-sac of the other side, as well as the posterior cul-de-sac, is occupied by a globular tumor of an elastic fluctuating consistence. This is a tube dilated in the form of a retort and lodged in Douglas's cul-de-sac, lifting the uterus up and depressing the rectum. Generally, then, the tumor is purulent and is not free. For some time it preserves its independence, but finally becomes so agglutinated to the contiguous parts that it is transformed into an abscess that cannot be enucleated—a pelvic abscess.

(To be continued.)

—Dr. Koerner calls the attention to the possible, and the probable, relation between nocturnal enuresis and mouth-breathing, the latter being due to disease or growth in the naso-pharynx. He cites two cases where the removal of the naso-pharyngeal disease promptly arrested the enuresis, which had taken place nightly for years.

THE PROPER LIMITATIONS OF SURGICAL GYNECOLOGY.

BY

PROF. R. LUDLAM.

PART II.

(Continued from page 421.)

Although an excessive tendency to this form of surgery has sometimes developed what has been styled "the abdominal instinct," it only affords another illustration of the abuse of what is good when it is properly applied and within reasonable bounds. For here, as in so many other cases, the excesses—not the exceptions—prove the rule, and we may judge somewhat of the merit of this form of treatment by the results of its having been misapplied and overdone.

Whether, in a given case, the chances of recovery lie within the possibility of a surgical operation will depend upon circumstances that require a most careful consideration. And these qualifying conditions may be studied under several heads. Conceding, for example, that medical cases not unfrequently recover where an improper diagnosis, or even when no diagnosis has been made by the attending physician, we should bear in mind that such a result is less frequent in good surgical practice. Indeed, in doubtful cases the exploratory puncture or incision must often determine the diagnosis, and the disclosure will help to decide if an operation is or is not expedient. It was the failure to apply this practical test, and the exclusive dependence upon therapeutical indications that permitted so many women to die of pelvic hematocoele, with an incidental peritonitis, before the abdomen was opened for undeveloped extra-uterine pregnancy. The same exclusive reliance upon internal remedies and the proper regimen, and of late

upon external antiseptics, has often been in the way of the prompt and radical cure of puerperal ovaritis and salpingitis and even of rupture of the uterus with unavoidable hemorrhage.

The conservative tenet which held that surgery begins where medicine ends is fast becoming as obsolete as some of the other rules that were issued against "meddlesome midwifery." The whole drift of anatomico-pathological research is toward the localization of disease in one or more of the bodily structures; and, in so far as they are local before they become general, they most naturally fall under some form of surgical treatment. Moreover, the very fact that with the lapse of time, and through some peculiar predisposition, which is inherited or acquired, they tend to become general, suggests and emphasizes the necessity for prompt action in this regard.

Take a case of tuberculous peritonitis that is not secondary upon some other form of the disease. The abdominal section, the removal of the ascitic fluid and of the larger part of the deposit, where it has not been too disseminated, have certainly cured the disease. So also with tubal and ovarian tuberculosis. In the latter case, if we except the testicle, the lesion is located in organs that are more isolated than we can find it anywhere else in the human body, and if we operate early, other things equal, we give the patient the best possible chance of recovery. By putting an end to the menstrual flow, when that is a necessary result of the operation, we stop a drain that would only make her a more easy prey to the threatened disease, and interrupt a child-bearing process that otherwise tends to perpetuate it.

There is little doubt that the larger share of ovarian and other cystic tumors that are removed so safely and so satisfactorily from the abdomen in our day are tuberculous and not cancerous, unless they have finally become so through neglect. They represent the local expression of a disease

which may not become general or alarming, certainly not incurable, until some months or years have elapsed since their first appearance. Even the common people are learning that the chance of recovery from an operation for their removal, and of getting rid of the trouble altogether, is greatly in favor of surgical intervention at as early a date as possible. And the lesson for the gynecologist is that in this class of cases surgery should often precede medicine in the order of their application. For not only would the case grow worse by delay in operating, and complications arise that could have been and should have been averted, but the time to fortify the vital resistance by internal and highly sanitary measures is after the possible source of infection, the real thorn in the flesh, has been taken away. This is the only way to prevent infection of the general system.

And if tuberculous growths can be removed before they have involved the lymphatics and the neighboring structures, why are we not justified in the early ablation of such as are cancerous, in the hope and with the reasonable expectation that they will not soon recur? They cannot be cured by medicine, and, if let alone, will surely go on to destroy the life of the patient. Where the organs involved are so isolated and so accessible, and where the means of confirming the diagnosis are so positive, in the early as well as in the later stages of the disease, there is no excuse for delay and for tampering with topical applications and the so-called "specifics."

The statistics for extirpation of the uterus for malignant disease are improving with the improved technique for vaginal hysterectomy and with an earlier resort to the operation. And I have no doubt that before very long this expedient will be quite as justifiable, and perhaps even more successful, than is the removal of the mammary gland for a similar cause. But it will always be a very serious operation, and in order to be radical must be made at an

early date in the history of the disease. Fortunately the removal of the uterus for various causes is likely to work a revolution in our ideas of uterine pathology, not only as concerns other lesions of the internal generative apparatus, but especially of uterine carcinoma. The outcome of being able to examine these organs directly they have been taken from the living subject—for which the pathologist must thank the gynecologist—will be that we shall soon be able to identify the same or kindred troubles in those who need our skill and care, and so to operate in season and more thoroughly. The secret of success is to make an early diagnosis.

But in determining whether surgical intervention is necessary, and, if so, how soon it should be applied in some of these cases, one thing especially should be borne in mind, viz., that the age and the increasing debility of these subjects predisposes them to a more rapid development of the morbid growth than if they were younger and more vigorous. The menopause and all that concerns it, and even the arrest of the catamenial function which is incident to the clinical history of certain of these tumors, not only causes them to grow more rapidly, but hastens the breaking down of the general strength and bodily vigor. It is an argument in favor of their possible malignancy. In women who have passed forty-five or fifty years almost any kind of abdominal tumor will develop with a rapidity that is in ratio with their age, and will all the sooner and more surely extend until it involves the general health and constitution. For this reason, which is based upon physiological and not upon fanciful grounds, the proper limitations of gynecological surgery present a very important field of study and of practice. Manifestly, this class of patients has no time to lose by experiment or by expectancy, and whatever is done for their relief should be done promptly and thoroughly, and with every possible precaution. In this way it has been my good fortune to rescue many women from immi-

nent death, and I feel like placing a very decided emphasis upon this portion of my paper.

That there are exceptional cases of neurotic disorder in women in which the existing cause is a diseased ovary, or ovaries, there can be no question. That in many of these cases the lesion is traumatic is equally certain, I think. That the nervous involvement may even become epileptiform, or epileptic, is an assured fact, and that the ablation of the offending organ, or organs, will sometimes cure the disease is not without verification. But this does not prove that all the hystero-neuroses to which young and middle-aged women are liable render them fit subjects for oöphorectomy. Indeed the indiscriminate resort to this operation for the relief of intractable nervous conditions has proved a failure, and for the very good reason that it could not cure the case if the focal point of mischief was elsewhere than in the ovary and tubes. If the nervous symptoms could be traced to a scirrhotic ovary, to an enlarged ovary that was incarcerated within the folds of the broad ligament, or bound down by fibrous bands from an old peritonitis, or if it had been badly injured by a fall or by a direct blow, as from a kick of a horse in the inguinal region, and there was a distinct monthly or menstrual return or aggravation of the disease, the Battey-Tait operation would be more promising of a good result. But it must be one of oöphoroepilepsy and not of congenital epilepsy, or of epileptoid conditions arising from other causes, or we cannot promise to cure it by any of the resources of peritoneal surgery.

It is possible, however, that the abdominal section may ultimately become serviceable in a wider range of cases of epilepsy and of epileptiform eclampsia than it is at present. In cerebral surgery, since Broca first employed it for local lesion of the brain, trephining has been extended from cases of traumatic to those of Jacksonian epilepsy with very encouraging results. And, just as has happened with the gynecologist, some of the cases have been very much bene-

fited by the opening of the cavity even where the lesion itself could not be found.

Nor should the twin fact that extirpation of the ovaries will neither cure nymphomania nor destroy the sexual appetite in women be forgotten. Highly erotic conditions and hysterical states that either spring from them, or are modified by them, will not be cured, or even controlled, by castration. In one of my vaginal hysterectomies, where the uterus was removed for an interstitial sarcoma three years ago, the same exaggerated sexual instinct remains and torments the poor woman as it did before the operation.

In all neurotic cases where it is a question if the uterine appendages should not be excised, it is a good practice first to determine whether the local cause of mischief is not seated elsewhere as, for example, in the bladder, the rectum, the brain, or the spinal cord. I have several times submitted such patients to my colleague, Prof. Fellows, for his opinion as an expert, that I might know if the seat of trouble was not in the sympathetic or the cerebro-spinal system, and his advice has been an excellent safeguard both for my patients and myself. I am firmly of opinion that in some long-standing cases of dysmenorrhea with bad mental and nervous wreckage, the trouble may have begun within the pelvis but has finally become more general, so as seriously to involve the nerve centers, although secondarily and indirectly. Such cases might perhaps have yielded to an early operation, but by the time that we are consulted it is too late. That the "gynecologists will never empty the lunatic asylums" is true for this reason, and not because they would be powerless against certain forms of sexual insanity if they were permitted to treat them in their incipency.

Concerning the treatment of those intra-pelvic and abdominal adhesions which are the product of peritoneal inflammation and exudation, especially when they are accom-

panied by suppuration, the principles of surgery make the way very plain, and too much time should not be spent in waiting for remedies to complete the cure. The liberation of the organs that are bound in unnatural positions at the risk of functional disability and even of organic disease in them, to say nothing of the chronic ill health and prolonged suffering of the patient, is certainly called for in some of these cases. And since there is no valid evidence that internal remedies alone are capable of radical results in this particular; since this kind of mischief is relapsing in its nature and is disposed to grow worse instead of better as time goes on; and since abdominal exploration with the proper resources of peritoneal surgery is safe in safe hands, we can see no reason why it should not be practiced. But we can see why such a result should not be decided upon without a due regard for all the circumstances of the case, nor as a rule until other means have been faithfully tried and have failed.

What the newer methods of treatment by electricity and massage may yet be able to accomplish as auxiliary to medicine, and as substitutes for a more decided operative intervention in these cases, remains to be seen. That some of the slighter forms of this lesion do yield to them, and that this department of uterine therapeutics is very promising there can be no doubt. But given a case of pelvic suppuration that is relapsing in character, and which corresponds to what used to be styled pelvic cellulitis with abscess, a condition that depends upon some form of salpingitis, I do not see why it is not as operable, with proper precautions, as an ovarian cyst or a uterine fibroid, tumors of the mesentery or the vegetations of the peritoneum, which Péan has described so clearly and delivered so successfully.

These and other considerations that might be adduced will serve to show what has already been done and what remains to be accomplished in the advance from medical

to surgical gynecology. Or rather, perhaps, they put the proper emphasis on distinct and contrasted resources. They teach us to combine the two when necessary, or, if best, to use them separately, but without confusing their special indications. In cases in which medicine alone is hopelessly inadequate to the cure, and when in the nature of things we know (if we know anything) that it must finally prove itself so, they suggest an early and prompt recourse to more radical measures. They tell us when delay is dangerous, and when the employment of internal remedies may more reasonably and skillfully follow, than precede, the use of the knife and its accessories ; when certain semi-surgical means may be trusted ; and when, after all that we may hope and promise, a fatal result is inevitable.

(To be continued.)

EDITOR'S TABLE.

—With the current issue the present editorial management will cease, and in saying farewell in this capacity the editor wishes to heartily thank all the many contributors whose kindly assistance and advice has been invaluable. I am especially pleased to announce the engagement as editor of Geo. W. Winterburn, M. D. He is so well and favorably known as an accomplished editor and writer that any other introduction than the mention of his name is uncalled for.

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—The American Obstetrical Society will hold its next annual meeting in the large clinic hall of the New York Ophthalmic Hospital on December 15. Addresses will be made by Prof. Walter Wesselhoeft, M. D., of the Boston University ; Prof. Samuel Edgar Mortimore, M. D., of New York ; Prof. James Carter Woods, M. D., of the University of Michigan ; George Clinton Jeffery, M. D., of Brooklyn, N. Y., and others, including Dr. George Wil-

liam Winterburn, the president of the Society. A cordial invitation is extended to all persons interested in this specialty.

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—The well-known observations of Oertel concerning the peculiar histological changes in the internal organs in human diphtheria make it important to determine whether similar alterations occur in animals inoculated with the Klebs-Loeffler bacillus of diphtheria. Quite full descriptions of the microscopical changes in some of the internal organs have been given by Babes, whose investigations on this point relate chiefly to the liver and kidneys of rabbits. The changes in the liver observed by this author varied in different cases. The principal lesions in this organ noted by him are swelling and degeneration of the liver cells, as well as proliferation of these cells, accumulation of leucocytes, often with fragmented nuclei (which, in some cases at least, he regards as evidences of proliferation), and of hyaline material and yellowish granular substance in the blood-vessels, and swelling and proliferation of the endothelial cells of the capillaries. In the kidneys he observed parenchymatous swelling of the epithelial cells, proliferation and degeneration of these, as well as of the endothelial cells, and hyaline masses in the blood-vessels. In the spleen he found hyperplasia of the lymphatic apparatus, and in one case he speaks of numerous nuclear fragments in the venous lacunæ.

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—With a view to extending these researches to all the organs of animals dead of experimental diphtheria, Drs. Welch and Flexner have been conducting a series of experiments with guinea-pigs, rabbits, and kittens. The cultures in this work were obtained from undoubted cases of diphtheria, and were in all instances pure cultures of the Klebs-Loeffler bacillus. An account of the results obtained is found in the *Bulletin of the Johns Hopkins Hospital*, and we present from that journal a brief *résumé* of their microscopical studies.

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—*Seat of Inoculation.*—Bacilli of diphtheria were found regularly in the seat of inoculation. They were present in the gray

necrotic-looking focus both free and within leucocytes. They may be absent from the œdematous fluid at a distance from this focus. Many of the leucocytes showed a fragmentation of their nuclei. Sections made from the seat of inoculation showed the bacilli in great numbers. The sections stained by means of Weigert's fibrin stain exhibited in a striking manner the bacilli and the fibrin.

The local action of the bacilli is of the most intense character. There is emigration and great destruction of leucocytes shown by disintegration of their nuclei; the fixed cells of the part have undergone a similar fragmentation, nuclei of connective tissue and muscle have succumbed, and leucocytes have wandered into these areas, many of the latter being destroyed also. There would appear to have been a proliferation of muscle nuclei in places not all of which have become fragmented.

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—*Lymphatic Apparatus.*—The lymph glands of the axillary and the inguinal regions were greatly affected. The changes in these structures are very typical.

There are hemorrhages under the capsule and into the substance of the gland. The blood-vessels here as elsewhere in the body contain a greatly increased number of leucocytes.

The cells of the gland are the seat of great changes. The principal lesions are in the lymph follicles, the lymph cords and lymph sinuses being also affected, though in less degree. Different follicles are affected in different degrees, and there are variations in different animals even of the same species. But in no instances were the lesions entirely absent.

The lesions consist of a marked alteration in the number, character, size, staining capacity and configuration of the nuclei making up the parts affected. The cell bodies are altered also, and an increased number of cells differing from the lymphoid type are found. The first thing that attracts attention is the unusual number of deeply-staining bodies in the tissue. These bodies are observed to vary in size and shape, and under a sufficiently high power some of them are recognized as nuclear figures. They are usually, however, globular, and under a magnifying power of

four hundred range from fine dust-like particles to larger particles, appearing with this power the size of a pin's head. The finer particles are often aggregated into larger globular masses, which are now free, and now inclosed in cells.

There are, again, deeply-staining particles present which show decided bizarre forms. Imperfect crescents, flask-shaped, bladder-like, whetstone, angular, and dumb-bell forms are more or less common. Occasionally nuclei appear, as if one end were drawn out and constricted into a ball-like protuberance that is being pinched off. The globular particles are, at times, grouped together with the bizarre forms into larger masses; what particularly distinguishes these bodies from the normal nuclei which remain is the intensity with which they stain.

All the chromatin particles, as before mentioned, are not within cells; indeed, as a rule, they do not occur in cells, though the number within cells varies considerably. In some glands much of this material is contained within globular cells several times larger than the lymphoid cells. In some sections these cells are observed to be present in considerable numbers, partly devoid of stained particles or nearly so, but usually they are full of the nuclear detritus.

In certain spots there is almost an absence of stained cells and particles. In these places it is possible to distinguish outlines of cells, then a finer granular, somewhat refractive, at times reticulated material, and here and there a deeply stained particle. But there are always a few cells remaining that stain more or less, and among these are round cells, larger than the lymphoid cells. This portion stains with Weigert's fibrin stains in such a manner as to indicate that the granular material is largely made of fibrin or of a substance allied to fibrin.

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—In the lymph sinuses, especially, occurred a considerable number of round or slightly oblong cells, quite colorless in appearance, containing bodies which resemble in a striking manner red blood corpuscles, and these cells remind one of the red blood corpuscle carrying-cells of the typhoid spleen. In alcohol preparations it was impossible to determine the exact nature of

the contents of these cells. Similar cells were found in the mesenteric glands and the spleen ; in osmic acid preparations, on the other hand, they are shown to be red corpuscles.

An alteration similar to that just described is found throughout the lymphatic structures of the body : in the spleen, mesenteric glands, rettoperitoneal glands, intestinal lymphatic apparatus (Peyer's patches, solitary follicles, and diffused lymphatic tissue), the bronchial glands, mediastinal glands, and cervical glands. The only variation is one of degree. As far as our study has gone, every gland examined has been more or less affected. The spleen is often very rich in nuclear fragments and foci of coagulation necrosis.

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—The cells of the *intestinal villi* in guinea-pigs and rabbits and the epithelium of the intestinal mucous membrane were involved. The lesions in these structures showed a like tendency to vary in intensity. The most striking changes consisted in a fragmentation of the nuclei of cells in the villi, especially of those surrounding the central vessels (lacteals or blood vessels), a disappearance of a large number of cells, and the presence of large round cells, similar to those described in the parts of the lymph glands most affected. These large cells often showed a very slight staining power, and shadows of cells were not uncommon. The nuclei of the epithelium were distinctly and extensively fragmented. Nuclear figures were to be seen and saprophytic bacteria were found in the necrotic tissue. These fragmented nuclei partook of the same characters as those already described and exhibited the same intense affinity for staining agents.

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—*The Liver*.—On frozen sections the dots and lines resolve themselves into smaller and larger masses of highly refractive cells, usually devoid of nuclei and retaining the outlines of liver cells. Reagents do not affect them to any great extent ; acetic acid causes them to swell somewhat and to become slightly less refractive. These cells are hyaline and represent foci of dead liver cells. Besides the groups which were visible to the naked eye as lines and dots there are small groups and single cells which show the same change.

Sections of the hardened organ were studied. Those from alcohol were stained in methylene blue and eosine. By this method the areas of dead liver cells stand out clearly in red. The cells generally have well stained blue nuclei and lightly stained red-cell bodies. But the hyaline cells are intensely red, either devoid of nuclei or, when a nucleus is present, it is manifestly altered. It is shrunken, often irregular in shape, and it stains differently from the nuclei generally.

Leucocytes are commonly found in such foci of dead liver cells. They are between the hyaline cells and sometimes apparently within them. There are fragments of nuclei in these places, some of which at least have been derived from the leucocytes which have wandered in.

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—An important change could be made out in these livers in connection with the central veins of certain lobules. Hemorrhages under the capsule were quite common, and in these lobules deep-seated hemorrhages into the tissue had taken place. These varied greatly in size, some being very small while others were quite large, involving the greater part of the lobules. It was observed that such intralobular hemorrhages originated in the central veins, and seemed to be due to a breach of continuity in their walls. For, when they were small a minute defect could sometimes be seen, and where they were larger a considerable rent was present in the vein wall through which the blood escaped. The walls of these veins were quite refractive in the fresh state, and gave, after hardening, a quite characteristic staining for hyaline with picric acid.

This focal death of liver cells just described was observed in guinea-pigs and kittens especially. In rabbits, in one case in particular, there was an extensive diffuse degeneration of liver tissue. The liver was yellowish and evidently fatty, and on frozen sections it proved to be the seat of a most extensive fatty degeneration. The cells, after the tissue had been hardened in alcohol, stained very imperfectly, many not at all. The nuclei of the liver cells were in many places in a state of disintegration or fragmentation: a few, of division. The cells throughout entire lobules

were affected. Leucocytes were numerous, both in the tissues and in the vessels, and many of those in the latter were fragmented.

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— *The Kidneys*.—Fresh frozen sections showed in guinea-pigs and rabbits fatty changes in the epithelium of the tubes and glomeruli. In kittens, owing to the large amount of fat in the epithelium normally, it is not easy to make out a pathological increase. Yet there would appear to be an absence of fat in the epithelium of the glomeruli and collecting tubes in the cortex under normal conditions. In some of our cases these structures contained minute fat drops. A more important change is a hyaline alteration of the glomerular capillaries and the smaller arteries. This was noticed in kittens in particular; and it often affected a few loops of a glomerulus, without involving the entire mass of capillaries. Hyaline substance was found completely filling the lumen of some capillaries.

Hardened and stained sections showed besides the hyaline change just mentioned fragmentation of the nuclei of the glomerular and tubal epithelium on a small scale, and the presence of minute deeply-staining round bodies between and in the tubal epithelium.

Adrenals.—These were generally congested, hemorrhages were often present, and in two cases the medullary cells were distinctly hyaline.

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— *Lungs*.—There were often hemorrhages under the pleura. The blood-vessels of larger size are distended with blood, and the number of leucocytes in them increased. The capillaries in the walls of the alveoli are distended with blood likewise, and there are hemorrhages into the alveoli. There is an exudation into some of them consisting of leucocytes and fibrin; but the leucocytes are few in number. There are many large cells present having a round nucleus of considerable size which stains quite deeply, but not solidly, with fuchsin. These cells are present in the areas of consolidation, and they are found also in considerable number in the nodes of the alveoli, that is, the points at

which several of them come together. They are probably derived from the epithelial cells of these structures.

Fragmentation of nuclei is not a prominent feature in the lungs. It does occur, but not extensively. It was noticed in the area of exudation, where it affects the nuclei of the large round cells as well as the leucocytes. Then it is seen in the epithelial lining of the larger bronchi, and in those bronchi that contain leucocytes fragments of nuclei are present in their lumina amid the exudation.

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—*The Heart* was the seat of a fatty degeneration, more or less intense, in nearly every case. In many of them every muscle fiber seemed to have undergone a minute fatty metamorphosis. In others the process was less general.

Another change was noticed in the nuclei of the *muscle* fibers in certain cases. It consisted of a fragmentation similar to that in other parts.

The muscles adjoining the lymphatic glands of the axillary and inguinal regions showed degenerative changes. There was necrosis of muscle fibers and wandering in of large numbers of leucocytes, a myositis being the result.

Cultures were made from the blood, liver, kidney, and spleen of these animals with negative results in every instance.

● GOLDEN GRAINS. ●

—Dr. Quisling, of Christiania (*Centralblatt für Gynäk.*, January 3, 1891), writes of nocturnal enuresis in new-born infants. He has himself observed five cases; in four, the right sterno-cleido-mastoid muscle was the seat of the affection; in one the left. In all five cases, the presentation had been pelvic. Dr. Quisling further collected two cases in which the induration was in the left muscle and the presentation pelvic, and two in which the induration was on the same side and the head presented, the child being delivered without the aid of art in each case. In most cases the

induration is purely traumatic, but hereditary syphilis and other morbid conditions in the child may predispose to the injury. In pelvic presentations, it is chiefly the muscle or the side which lies most forward ; in head presentation that on the side which lies posteriorly, which is injured. The original injury is simply laceration, but the induration, which first attracts the attention of the mother, nurse, or physician, is, according to Dr. Quisling, myositis, or reactionary inflammation around the torn fibers. The child must be watched for some time after the subsidence of the injury, as wry neck has been known to follow induration of the sternomastoid. Massage and resolvent applications are needed in the earlier stages of this affection.

—Porak thinks the structure of the cervical tissues as well as the activity of the longitudinal muscular fibers of the corpus uteri should be taken into account in the ætiology of rigid cervix. Failure to demonstrate definite alterations of structure in the cervical tissues of these cases does not justify the assumption that there is no lesion. The intimate structure of the muscular fiber may be modified and the anomaly escape detection by the microscope. Uterine inertia must be a factor in the non-dilatation of the cervix even in early rupture of the membranes or in œdema. But clinical experience teaches that there is in a certain proportion of cases from the beginning of labor, condition of the cervical tissues unfavorable to dilatation. The solution of the ætiological problem the author thinks is to be sought by studying the anatomy and physiology of cervical softening during pregnancy.

—In the differential diagnosis of infantile cerebral syphilis from tubercular meningitis, Fournier gives the following points :

1. In cerebral syphilis there is constant absence of fever, except in rare and exceptional cases.

2. We do not meet in cerebral syphilis the usual symptoms of tubercular meningitis such as alterations of redness and pallor of the face ; the boat-like abdomen, the variable pulse ; the want of concordance between the temperature, which may be high with a slow pulse, etc.

3. Hydrocephalic cries are not as common to cerebral syphilis as to tubercular meningitis (Fournier states that he has never

heard them in his patients). Nor are intense constipation, sudden vomiting, delirium, photophobia, opisthotonos, etc., as common in the former as in the latter.

4. The emaciation and modifications of the general condition are more rapid in tubercular meningitis.

—M. Dauriac (*Bull. de la Soc. Anat. de Paris*, April, 1891, pt. 9) describes a case of high interest to the obstetrician for two reasons. A primipara, aged 27, was admitted into the Pitié Hospital on March 12, 1891, a fortnight after delivery at term, acute septic symptoms having set in. Three intra-uterine injections were thrown up, pus came away, and the temperature fell. To the left of the uterus was a movable irregular mass. After a fortnight's rest she disobeyed orders, got up, and her temperature rose. On April 8, when it exceeded 103° , pus began to escape from the anus. On April 9 an intra-uterine injection of sublimate was given. Pus came away freely, and some of the injection returned by way of the anus. The vagina was free from any fistula. On the evening of April 11, as an intra-uterine injection was being thrown up by means, as before, of a Doléris sound, the patient complained of tinnitus and giddiness. Then she was seized with a feeling of great anxiety, and convulsive movements of the facial muscles and arms occurred. The heart beat tumultuously, and dyspnoea, at first severe, was followed by total cessation of respiratory movements. Artificial respiration, flicking with wet towels, electricity, etc., were of no avail. At the necropsy the right chambers of the heart were found empty, but there was a large recent clot in the right ventricle. There was no embolism of the pulmonary artery. The general peritoneal cavity contained no fluid of any kind. The right uterine appendages were normal. The left formed a tumor as big as a pear, pushing the uterus to the right. This tumor adhered intimately to the uterus and rectum. It fluctuated and was full of pus, which had originally formed both within the left fallopian tube and the broad ligament, separately. The two purulent foci had fused. The pus was feculent in appearance and odor. It flowed into the rectum through a fistulous orifice as large in caliber as an ordinary drawing pencil, while it found its way into the cervical

canal of the uterus through a very narrow track. This track was continuous with a deep laceration of the cervix, which probably represented the source of the complications above described.

—The microbial origin of diphtheria was affirmed as early as 1861 by Laboulbigne, who described parasites which he had found in the false membranes, and at a later day Letzerich, Talamon, and Quinquaud called attention to certain bacteria to which they attributed the origin of this disease. It was not, however, till the researches of Klebs in 1883, and those of Loeffler the year following, that any precise data were advanced respecting the specific contagion of diphtheria. Klebs discovered a peculiar micro-organism in diphtheretic membranes, and this was described with more precision by Loeffler, who succeeded in isolating and cultivating it, and with the products of a pure culture he inoculated animals, reproducing in them a disease strikingly resembling diphtheria. In no case, however, did Loeffler note the supervention of paralysis.

—Loeffler's memoir, published in 1884, is a model of the caution and reserve which should characterize a scientific treatise. He had failed to find the bacillus of Klebs in certain typical cases of diphtheria; he had found a bacillus just like this in the mouth of a healthy child. This experimentation was continued by Roux and Gersin, who announced in 1888 that they had detected Klebs's bacillus in all the cases which they had studied; and after having reproduced the disease in animals (fowls, pigeons, guinea-pigs, and hares) by the inoculation of pure cultures, they have in several instances witnessed paralysis similar to what is observed in man as a sequel of diphtheria. They have finally proved that these cultures contain a poison (ptomaine) which, according to the dose, kills the animals rapidly or gives them paralysis. They have also shown that the bacillus does not develop on a healthy mucous membrane, and that to obtain a false membrane it is necessary to irritate the mucous surface, or, better still, to excoriate it or deprive it of its epithelium.

—The persistence of the virulence of Klebs's bacillus has also been shown by these experimenters. A culture in bouillon kept

six months from the light in a closed tube, when sown anew, gave strong, healthy colonies, which, when inoculated in guinea-pigs and hares, proved to be exceedingly virulent. A culture in serum, kept five months from the light in a tube stopped with wadding (which of course did not exclude the air), had a feeble virulence, but when sown in a new culture field recovered all of its original activity.

—Sevestre, from whose just published *Études de Clinique Infantile* we have borrowed, cites from his own experience and that of his colleagues cases tending to prove the extraordinary vitality of the contagion of diphtheria. A young girl at Passy contracted diphtheria from handling clothes worn by her mother two years before during an attack of diphtheria, and which had not been disinfected. Worms relates the case of a man who, when suffering from a simple attack of quinsy, painted his throat with an old camel's-hair pencil which he had taken, wrapped up in a paper, out of a drawer. This pencil had been used four years before to make applications to the throat of a child sick with diphtheria, and by using it the man contracted the disease.

—Other instances of a similar kind are on record. One related by Dr. Grellet, of Algiers, attributes with some probability the derivation of the contagion of a fatal case to the occupancy by the patient of a room where seven years before three children had died of diphtheria. The room had not subsequently been cleansed, whitewashed, or papered. A more remarkable case still is recorded by Dr. Legrand, and cited by Sevestre. An epidemic of diphtheria broke out in a village of Normandy, and the contagion was traced to a boy fourteen years of age, who was the first to come down with the disease. This boy was the son of a grave-digger, and had, a few days before the onset of his sickness, been employed with his father in digging up and removing to another part of the cemetery the bodies of a number of persons (mostly children) who twenty years before had died of diphtheria. In this instance, if the disease was thus contracted, the germs of the disease must have remained dormant during all

these years, ready to manifest their pathogenic presence, to develop and multiply, when the favorable conditions appeared.

—The direct transmission of the disease by the false membrane has been observed again and again, and physicians and nurses who are compelled to make local applications to the throats of their diphtheritic patients cannot be too careful not to be infected by receiving into their eyes, nose, or mouth, fragments of diphtheritic patches which patients in their struggles or fits of coughing may expel.

—Can diphtheria be carried in the clothing? From what has been said above of the vitality of the virus, one would be disposed *a priori* to give an affirmative answer to this question, and the facts justify such an answer. Sevestre relates the history of a patient in his service at St. Antoine who took diphtheria when recovering from typhoid fever. This patient's sister, an attendant in the diphtheria wards of Trousseau Hospital, had visited the patient a few days previously, and had left with him her shawl. This, Sevestre thinks, was without doubt the cause of the contagion. Cases of the same kind are related by Salter and others. that diphtheria is also communicated by contact with a person who has had this disease, even during the period of convalescence, when no false membranes any longer exist, unless through the clothing, may be regarded as doubtful.

—As to whether the contagion may infect the inspired air, there certainly seems no reason to doubt that a patient suffering from croup or diphtheria may, during fits of coughing, expel particles of false membrane or minute portions of mucus which may for a time remain suspended in the air of the room and render it infectious. It is, however, proved that the contagion of diphtheria is but little diffusible, and that, as a rule, in order for contagion to be imparted there must be contact between the sick person and the person to be infected. Lancry, Bard, and Bretonneau insist upon this proposition, and instances are sufficiently numerous where the disease has attacked all the members of one family and spared the neighboring families, where it has prevailed in one part of a tenement and spared the family living in the other part.

—Within a few years numerous facts have been published assigning to diphtheria a near kinship if not identity with a disease prevalent among fowls (the pip or *pepie*), and it has been argued with some plausibility (memoirs of Wolff, Nicate, Paulinus, Delthel, Turner, Menzies, Teissier), that diphtheria in the human subject is often contracted from fowl. It is hard to gainsay the facts published by the above mentioned observers, and instances of the kind are accumulating.

At what time does diphtheria begin, and when does it cease to be contagious? Bard says from the very first day of its appearance, before the formation of membranes even, and he cites facts to prove its contagiousness all through convalescence till the thirty-fourth and fortieth day. Ogle knew a child convalescent from diphtheria, after a month of quarantine and return to school, to give diphtheria to nine of its playmates. It is probable that in this case, and those of Bard, the germs had remained in the clothing, and that had suitable disinfection been practiced early the communication of the disease would have been prevented. It is to be inferred from all that we know about the contagion of diphtheria, that the patient ceases to produce germs after the active manifestations of the disease have ceased.—*Bost. Med. and Sur. Jour.*

—Dr. SWIECICKI (*Przegląd Ckarkis*, January 24, 1891; *Revue Obstét. et Gynéc.*, May, 1891; *Br. Med. Jr.*) observes that puerperal septicæmia, like other general infections, is due to the toxalbumins secreted by the bacteria. Natural cure is obtained by the elimination of these septic products through the urine, sweat, saliva, fæces, etc. This elimination must be assisted by treatment. The organism should be washed out. Dr. Swiecicki successfully treated a bad case of puerperal fever on these principles, beginning on the fifth day after delivery. First, a liter ($1\frac{3}{4}$ pint) of a physiological solution of table salt was injected into the stomach every hour, and later on every two or three hours. Twice a day a subcutaneous injection of hydrochlorate of pilocarpin (1 centigramme at a time) was administered. Alcohol was given as a stimulant. The patient had 17 liters of the saline solution, and six hypodermic injections of pilocarpin, altogether. The favorable

action of the treatment was seen as early as the second day, thanks to the increase in the quantity of the urine, sweat and saliva. The patient, who at first presented all the signs of septicæmia, speedily improved, the temperature fell, the pulse became full, and the rigors less frequent and shorter. Washing out of the stomach with the saline solution may conveniently be replaced by enemata of the same fluid.

—Schücking replies rather vigorously to Saenger's recent criticisms of his operation of vaginal ligature (*Centralbl. f. Gyn.*) Saenger's criticisms were based mainly on the possible effect of vaginal ligature on subsequent pregnancies. Against the 12 cases of seasonable births and 109 cases of pregnancy after ventro-fixation cited by Saenger, the author claims 23 cases of full term births and 217 cases of pregnancy after vaginal ligature.

Ventro-fixation he regards as a dangerous operation. Abortion or premature labor is common after this operation, while vaginal ligature is free from danger, is reliable in its results, and does not in the least tend to disturb a subsequent pregnancy.

The author's operation is indorsed by many of the best German authorities in preference to ventro-fixation, and Klotz after operating in sixty-two cases by the latter method has abandoned it for that of Schücking.

—Dr. Gustav Klein (*Centralbl. f. Gyn.*) as the result of experimental research believes that in pregnancy the epithelium of the endometrium and the uterine glands undergoes a distinct fall in type, that is to say, it changes from columnar-ciliated to cubical or pavement epithelium. The same change occurs in the fallopian tube in ectopic gestation. This change is peculiar to pregnancy and hence is a proof of pregnancy. The columnar epithelium remains unchanged in the deepest part of the glands. The decidua cells are simply specialized forms of the round cells in the connective tissue under the endometrium, from which they are directly developed. The decidua cells are in themselves not absolute proof of pregnancy, as the connective tissue cells of the uterus may undergo similar changes under other influences besides pregnancy; ultimately the decidua cells undergo degeneration, a true necro-biosis rather than fatty degeneration, and this change

is apparently the actual cause of birth. In other words, the ovum becomes a foreign body, and is expelled by uterine contraction. Premature degeneration of the decidua cells accounts for abortion.

—J. T. Kent, in *The Medical Advance*, gives some interesting points on kali carbonicum. Thus he says :

It has cured many complaints of the uterus when the back symptoms were present. Awful bearing down in the back and buttocks ; must press hands against back or lie on back and press hard against it with both hands. Menses too early, scanty, of a pungent odor, acrid, covering thighs with an itching eruption. Its discharges are excoriating. During every menses puffing above the eyes, headache, coryza as described. During menses swelling of the glands ; pains in the back. During every menses a nettle rash all over the body, burning, itching like fire ; keeps her awake. Heavy aching in the back, like a weight, extending down the buttocks and hips. Sore pain in the vagina during coition. Sepia and sulphur are worth remembering for this condition. Sometimes it exists as the only symptom ; then give sepia. This debilitated state predisposes to abortion. The tendency to miscarriage is often overcome by kali carb.

Back aches so badly while she is walking that she says she feels that she could lie down in the street to obtain relief. This is in the sacrum.

After abortion, when there is great weakness of back and lower extremities, dry cough, long continued sweats, chronic inflammatory condition of uterus with nausea and vomiting. Labor pains insufficient, violent backache, wants it pressed. Pains pass off down buttocks, pains and pulse weak ; here we get the element of a weak heart. Adherent placenta.

When in abortion the fetus comes away but placenta remains, and no other symptom ; nothing striking ; sepia will bring on the pains at once and remove it in a very little while.

If associated with a teasing to urinate, burning and almost constant desire to urinate, cantharis will bring on the pains to expel the afterbirth at once.

If it is a scrawny, tall, slender woman, who wants the covers off, is distressed by warmth, secale will bring the afterbirth.

—Thomas states that in ninety-and-nine cases out of a hundred, when a woman passes blood from the vagina after the menopause, malignant disease will be found somewhere in the genital tract.

The exception he notes is that of hemorrhagic vaginitis, in which the blood oozes from the vaginal mucous membrane. Here the treatment is to separate the walls of the vagina by means of a glass plug, making alterative applications to the parts or packing the vagina with iodiform gauze, and general tonics for restoring her defective hematic condition. He also refers to a form of senile hysteria, a result of retrograde metamorphosis of sexual organs, in which the mind is affected and there is melancholia, lasting for years.

—Dr. Ross, of Toronto, gives his ideas as to the proper method of procedure in the treatment of imperforate hymen, as follows :

1. Warn the husband of the danger of the operation.
2. Give the patient an anæsthetic.
3. Incise and tear the hymen freely.
4. Wash water in at once to take the place of and to wash out the blood and débris; wash until the water comes out clear. Several quarts will be required.
5. Pack the cavity full of iodiform gauze; use no compression on the abdomen.
6. Stitch the internal and external mucous surfaces of the hymen together.
7. Apply an antiseptic pad to the genitals.
8. Remove the gauze in forty-eight hours, wash out cavity, reapply gauze.
9. Keep the patient in the recumbent posture for two weeks and in bed or on a sofa for a week or ten days longer.
10. If symptoms pointing to ruptured or leaky tube with accompanying peritonitis set in, open the abdomen, remove the cause of the peritonitis if possible, wash out the peritoneal cavity and drain. To be successful this must be done early.

—Vaton (*Revue de Bibliographie Médicale*) recommends two methods in simple cystocele : Stoltz' operation, if the cystocele be of medium size; extra-peritoneal cystopexy, if the cystocele be pronounced or complicated. In *résumé* the indications are as

follows: 1. Simple cystocele; Stoltz' operation or extra-peritoneal cystopexy; 2. Complicated cystocele; if there be urethrocele, Emmet's operation, but with denudation of the central section; if there be uterine prolapsus, colposyntomy added to Alexander's operation, with or without trachelorrhaphy; if there be rectocele, Stolz' operation, then posterior colporrhaphy; finally, if rectocele and uterine prolapsus exist simultaneously, Stolz' operation with Hegar's denudation or, even, the prolapsus being considerable, Alexander's operation.

—Dr. Pradel publishes, in the *Revue Obstétricale et Gynécologique*, an interesting observation of a young woman who, in three years, had one miscarriage in two months, and was twice delivered of dead children. The woman was healthy, and both she and her husband were free from syphilitic taint. For eleven years this patient had worked in a cigar manufactory. Our confrère asks if these accidents were due to the noxious occupation.

—According to Dr. Lebail, the menstruation of workers in tobacco has appeared to be irregular, in consequence of a functional super-activity of the uterus characterized by frequent metrorrhagias.

This influence of tobacco is also admitted by Dr. Bordier, of Paris.

From inquiries made by the midwives of the quartier Gros-Caillon, Dr. Delaunay affirms that miscarriages are more frequent in tobacco-workers than in others of the same quartier not employed in this work and that their children at term are subject to a high rate of mortality. Schneider has demonstrated the presence of tobacco in the urine of cigar-makers and Ruet in the amniotic fluid. Such are some of the evidences in favor of Dr. Pradel's ideas.

—M. Paul Petit (*Bulletins et Mémoires de la Soc. Obstét. et Gynéc. de Paris*, May, 1891) exhibited before the Paris Obstetrical Society a subject, aged twenty, who had been christened and brought up as a woman, and served, as a girl, at a restaurant. Of moderate height, the patient had long hair, a masculine expression and voice, a downy mustache, and flat breasts. The larynx was not

prominent. The sexual desire was toward males, coitus was easy and pleasurable, but without emission. No menstrual flow or molimen had been noticed. The patient had recently contracted syphilis. The penis was well developed. The corpora cavernosa were completely separated from the urethral canal. A ridge of skin (*bride masculine* of Pozzi) ran from the glans along the groove between the cavernous bodies, dividing posteriorly into three parts, the lateral divisions being continuous with rudimentary labia minora, the median segment running to and around a meatus urinarius of the female type. Behind the meatus was the vaginal orifice, which bore a rudimentary hymen, hardly admitted the little finger, and led to a canal over $2\frac{1}{2}$ inches long. The labia majora were well developed and covered with a papular syphilide. No uterus could be detected on vesico-rectal palpation. No testes lay in the labia or inguinal canals. On rectal exploration a firm, reniform, movable body could be felt to the left; it was probably a testicle. M. Pajot believed that this patient was a true hermaphrodite. M. Polaillon insisted that it was a male, and that there was no such thing as a true hermaphrodite, at once a potent male and fertile female. M. Jouin intended to dispute this doctrine. Dr. Petit's case was evidently an instance of perineo-scrotal hypospadias.

BOOK REVIEWS

GENTRY'S CONCORDANCE REPERTORY. Vol. vi. By WILLIAM D. GENTRY, M. D. A. L. Chatterton & Co., 78 Maiden Lane, N. Y., 1890.

The concluding volume of Gentry's work contains some features not common to other repertories. Thus we find nearly one hundred and fifty pages of the latter part of the book devoted to key notes. The present volume is divided into "Neck and Back," "Upper Extremities," "Lower Extremities," "Bones and Limbs in General," "The Nerves," and "Generalities and Key Notes." All through the whole six volumes we have been much pleased with Dr. Gentry's arrangement of the rubrics, and congratulations are due the author on the splendid reception with which his work has met from the profession. As a parting word we wish every homœopath the good fortune of possessing this valuable repertory.

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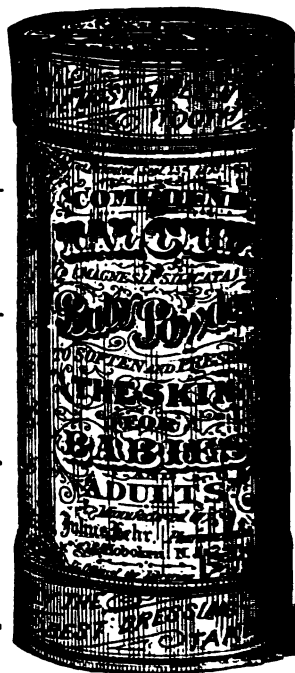
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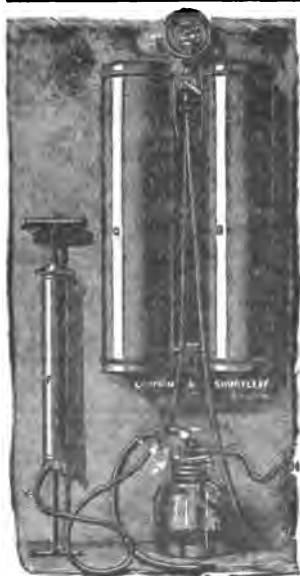
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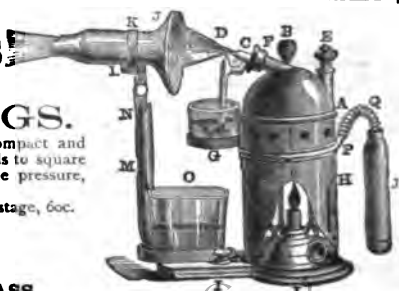
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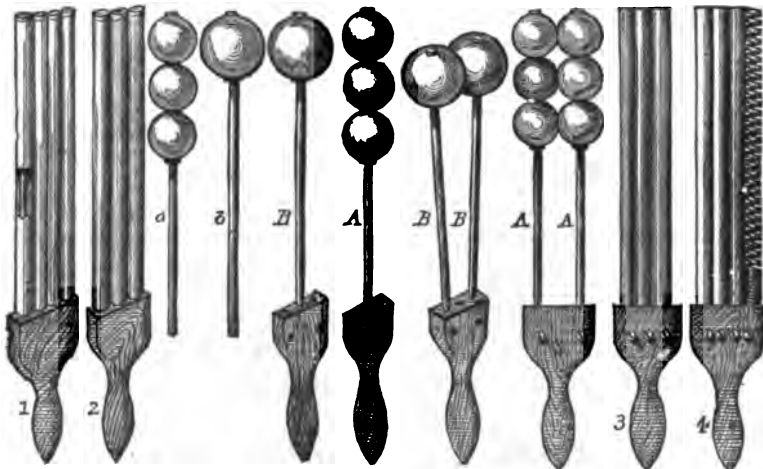
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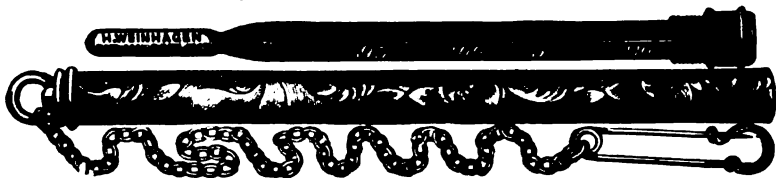
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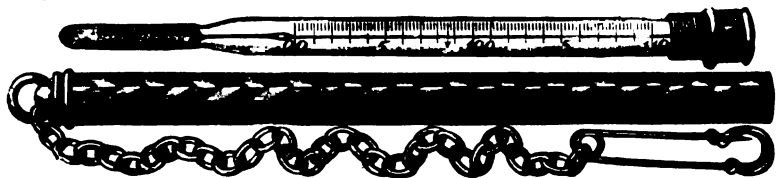
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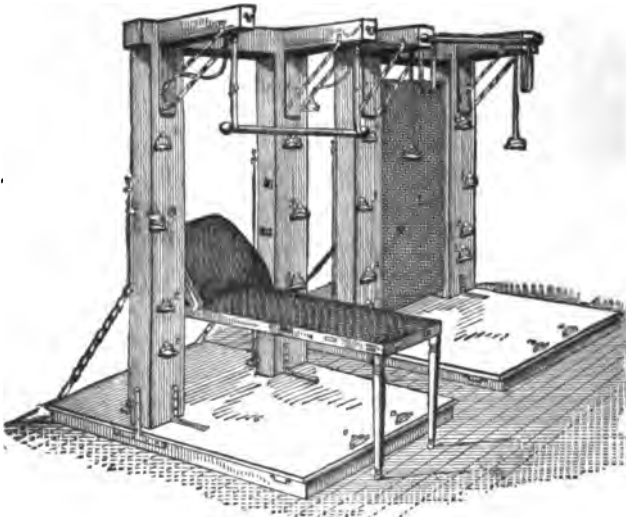
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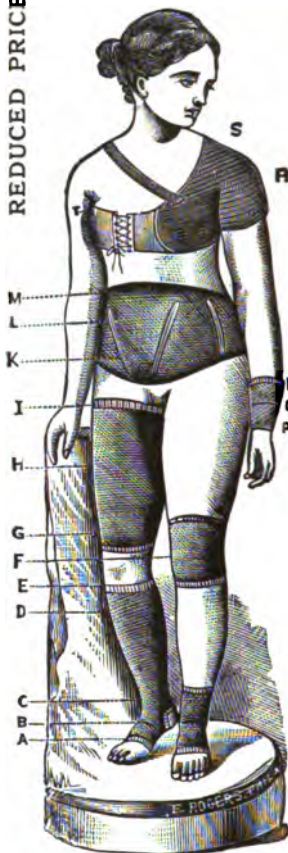
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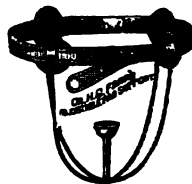
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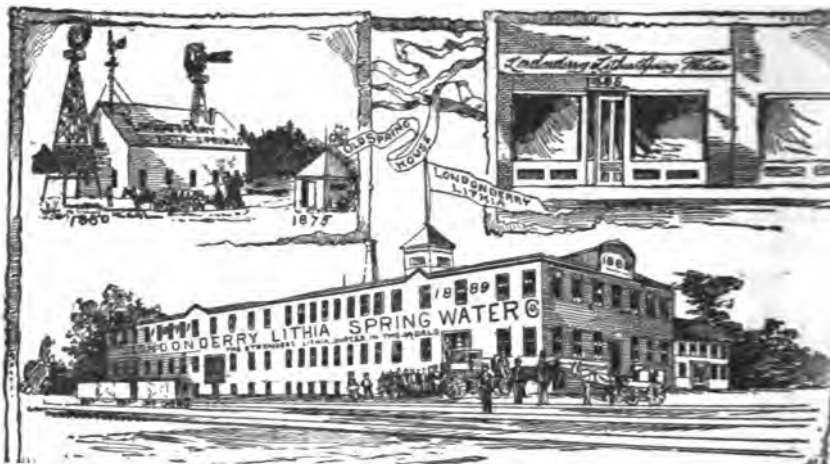
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